ORDER NO.VMD9903005C8

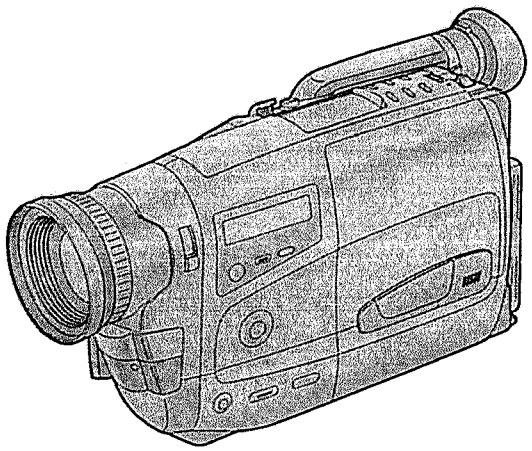
Service Manual

VHS-C Movie

Panasonic VHSC PAL HQ

NV-RX64B / NV-RX67EG/E

DL-MECHANISM



SPECIFICATIONS

SPECIFICATIONS

ITEM	SPECIFICATION	ITEM	SPECIFICATION
POWER	Source: Battery Pack: 7.2 V DC AC Adaptor: 7.9 V DC Consumption: 6.1 W (Battery operation)	VIDEO	HEADS: 4 Rotary heads, 1 flying erase head
			OUTPUT: PHONO CONNECTOR: 1.0 Vp-p 75 Ω unbalanced
VIDEO RECORDING SYSTEM	4 rotary heads, helical scanning system PAL	AUDIO	HEADS: 1 Stationary head (Normal Mono)
			OUTPUT: PHONO CONNECTOR: -6 dBV (47kΩ loaded)/less than 1 kΩ
TAPE FORMAT	VHS-C Cassette Tape (Tape width 12.7 mm)		INPUT: MIC IN: -70 dBV, 4.7kΩ or more, unbalanced
TAPE SPEED	SP mode : 23.3 mm/s LP mode : 11.7 mm/s (Except NV-RX67EG/E)	OPERATING TEMPERATURE	0-40 °C
	Record/Playback Time: SP mode : 45 min. with NV-EC45XG LP mode : 90 min. with NV-EC45XG (Except NV-RX67EG/E)	OPERATING HUMIDITY	10-80 %
		WEIGHT	Approx. 745 g (without Battery Pack)
	FF/REW Time: less than 6.5 min. with NV-EC45XG	DIMENSIONS	90 (W) X 127 (H) X 265 (D) mm
CAMERA	PICK-UP ELEMENT: CCD (Charge Coupled Device)	STANDARD ACCESSORIES	1 pc. AC Adaptor 1 pc. Battery Pack 1 pc. Cassette Adaptor (Except NV-RX64B) 1 pc. Shoulder Strap 1 pc. DC Output Cable 1 pc. Battery (Except NV-RX64B) 1 pc. AC Cord 1 pc. AV Cord 1 pc. Remote Controller 1 pc. Remote Controller Holder 1 pc. Battery Cover 1 pc. Button Battery 1 pc. 21-Pin Adaptor (NV-RX67EG/E Only)
	STANDARD ILLUMINATION: 1,400 lux		
	MINIMUM REQUIRED ILLUMINATION: 0.7 Lux (Low Light Mode)		
	LENS: 22 : 1 Power Zoom Lens with Digital AI Auto Focus, Auto Iris, F1.6 (3.7-81.4 mm), Filter Diameter: 43 mm		
	IMAGE SENSOR: 1/4-inch CCD Image Sensor		
	VIEWFINDER: 0.5-inch Electronic View Finder		

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. INTRODUCTION

1.1. INTRODUCTION1

This service manual contains technical information which will allow service personnel's to understand and service this model.Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

Note 1:
Adjustment procedure for Mechanism-Chassis is separate volume.
Please refer to following manual for detail of adjustment procedure for Mechanism-Chassis.
Order number for adjustment procedure of Mechanism-Chassis : VMD9412M130

Note 2:
These movie camera uses AC Adaptor is VSK0541.
VSK0541: Used by NV-RX64B, NV-RX67EG/E .
The Service manual for AC Adaptor is separate volume.
Order number for AC Adaptor-----VSK0541 (VW-AS7) : VMD9812066C8

2. SERVICE CAUTION

2.1. EEPROM DATA FOR SPARE PARTS OF THE CAMERA/MAIN C.B.A.

- **When the Camera/Main C.B.A. is replaced, the fixed and average data must be changed by Tatsujin kit according to the Movie Camera's suffix.**
- **Then, confirm and/or adjust the VTR and Camera adjustment one by one.**

2.2. SERVICE EXTENSION CABLES.

- **This model is required the following extension cables for all connections.**
- **And for more convenient service, prepare the S/S Zoom SW U. (VXU1488), the Camera OP. U. (VXU1523) and the VTR OP. U.**

(VXU1519/ VXU1520) through a spare parts route.

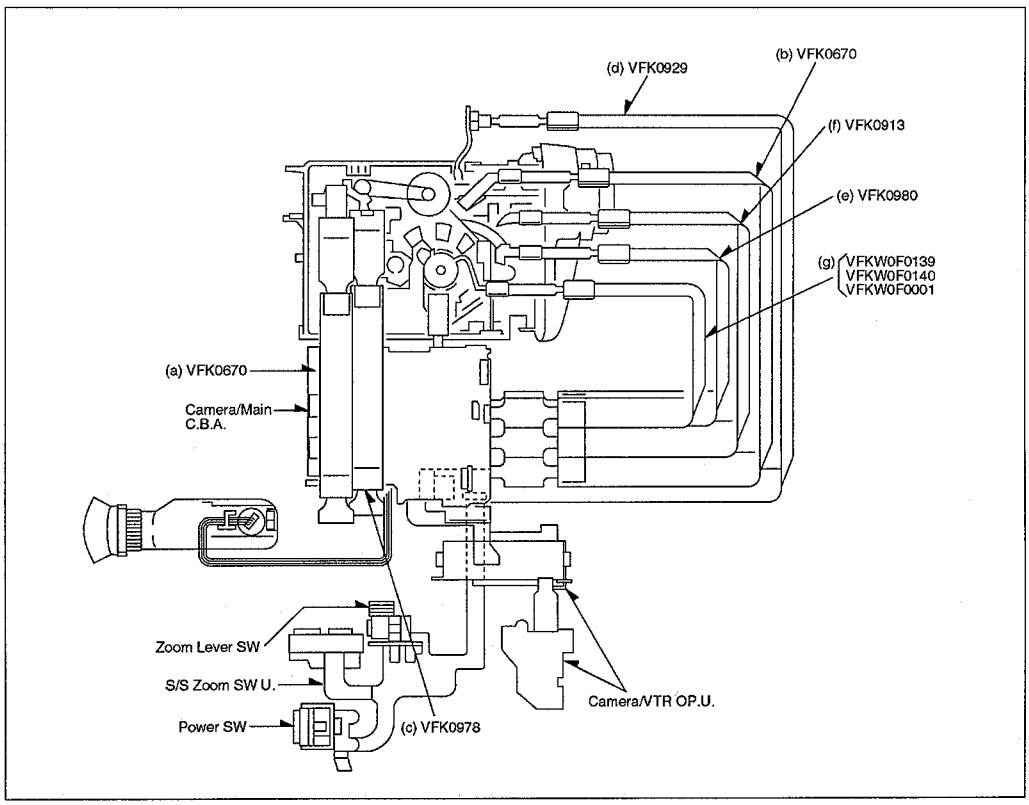
2.2.1. In case of Flat cables.

- Use the following extension cables when checking or adjusting individual circuit boards.

Ref.	Part No.	Pin	Part name	Connection	Q'ty	Remarks
(a)	VFK0670	18	Flat Cable	FP6001-Mecha. Chassis	1	
(b)	VFK0670	18	Flat Cable	FP2002-Capstan Motor	1	
(c)	VFK0978	6	Flat Cable	FP6002-Mecha. Chassis	1	
(d)	VFK0929	12	Flat Cable	PP301-CCD	1	
(e)	VFK0980	9	Flat Cable	FP4001-A/C Head	1	
(f)	VFK0913	18	Flat Cable	FP701-Lens Unit	1	
(g)	VFKW0F0139	7	Attachment Connector	FP2001-Cylinder	1	Included in Tatsujin-Kit
	VFKW0F0140	7	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	

How to use extension cables.

Fig. T1



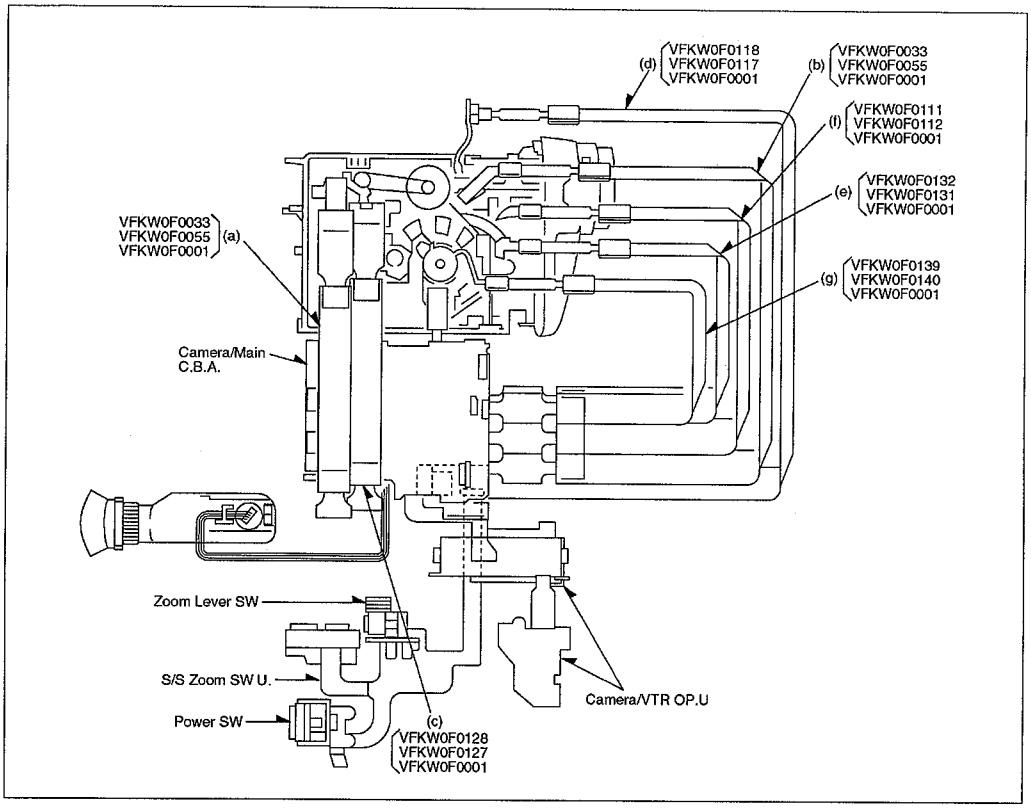
2.2.2. In case of Tatsujin Cable.

- Use the following extension cables when checking or adjusting individual circuit boards.

Ref.	Part No.	Pin	Part name	Connection	Q'ty	Remarks
(a)	VFKW0F0033	18	Attachment Connector	FP6001-Mecha. Chassis	1	
	VFKW0F0056/ 0055	18	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(b)	VFKW0F0033	18	Attachment Connector	FP2002-Capstan Motor	1	
	VFKW0F0056/ 0055	18	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(c)	VFKW0F0128	6	Attachment Connector	FP6002-Mecha. Chassis	1	
	VFKW0F0127	6	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(d)	VFKW0F0118	12	Attachment Connector	PP301-CCD	1	
	VFKW0F0117	12	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(e)	VFKW0F0132	9	Attachment Connector	FP4001-A/C Head	1	
	VFKW0F0131	9	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(f)	VFKW0F0111	18	Attachment Connector	FP701-Lens Unit	1	
	VFKW0F0112	18	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(g)	VFKW0F0139	7	Attachment Connector	FP2001-Cylinder	1	
	VFKW0F0140	7	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	

How to use extension cables.

Fig. T2



2.2.3. Service Position for Movement of Mechanism.

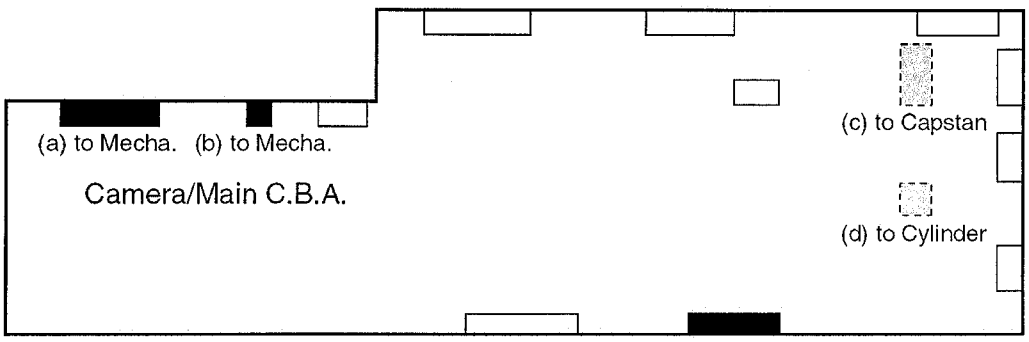
- Use the following extension cables when checking the Mechanism.

Ref.	Part No.	Pin	Part name	Connection	Q'ty	Remarks
(a)	VFK0670	18	Flat Cable	FP6001-Mecha. Chassis	1	
(b)	VFK0978	6	Flat Cable	FP6002-Mecha. Chassis	1	
(c)	VFK0670	18	Flat Cable	FP2002-Capstan Motor	1	
(d)	VFKW0F0139	7	Attachment Connector	FP2001-Cylinder	1	Included in Tatsuji Kit
	VFKW0F0140	7	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	

In case of Tatsujin Cable.

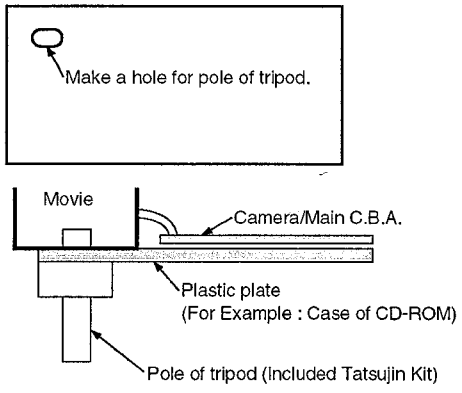
Ref.	Part No.	Pin	Part name	Connection	Q'ty	Remarks
(a)	VFKW0F0033	18	Attachment Connector	FP6001-Mecha. Chassis	1	Included in Tatsuji Kit
	VFKW0F0055	18	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(b)	VFKW0F0128	6	Attachment Connector	FP6002-Mecha. Chassis	1	
	VFKW0F0127	6	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(c)	VFKW0F0033	18	Attachment Connector	FP2002-Capstan Motor	1	
	VFKW0F0055	18	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	
(d)	VFKW0F0139	7	Attachment Connector	FP2001-Cylinder	1	
	VFKW0F0140	7	Attachment Connector		1	
	VFKW0F0001	28	Common Cable		1	

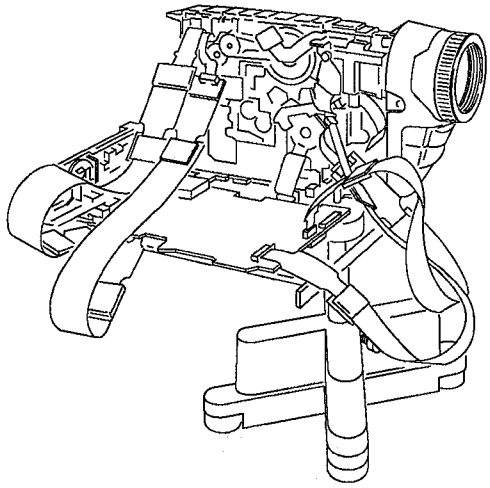
2.2.4. Service position for Movement of Mechanism.



2.3. SERVICE POSITION OF CAMERA/MAIN C.B.A.

- Please prepare the following plastic plate to hold C.B.A. during checking it.

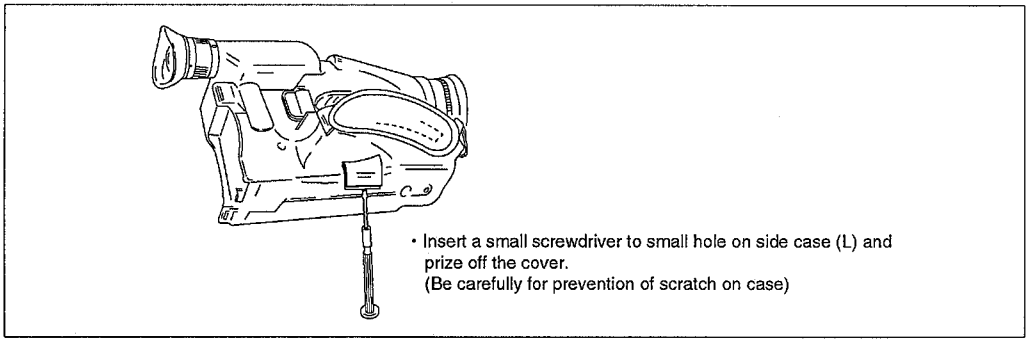

Make a hole for pole of tripod.
Movie
Camera/Main C.B.A.
Plastic plate
(For Example : Case of CD-ROM)
Pole of tripod (included Tatsujin Kit)



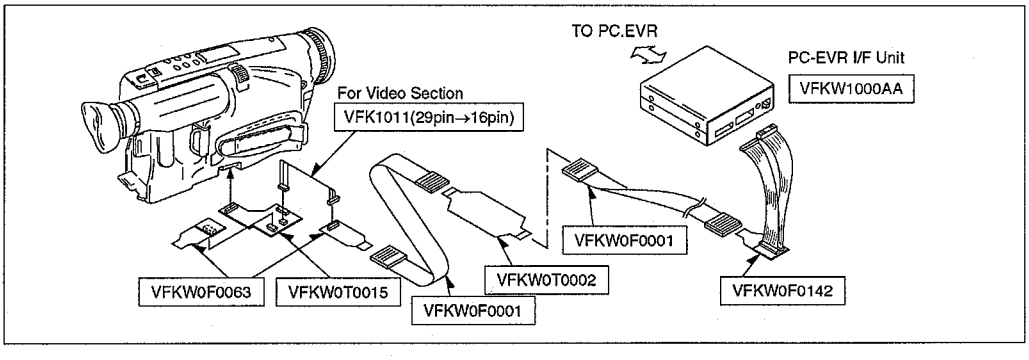
2.4. SET-UP FOR ADJUSTMENT OF TATSUJIN.

- For adjustments with Tatsujin, it is not necessary to open the side case.

- Just open the small cover on the side case (L) by a small screwdriver.


• Insert a small screwdriver to small hole on side case (L) and prize off the cover.
(Be carefully for prevention of scratch on case)

- And insert the Extension Board and connect Tatsujin cable as follows



2.5. THE BUILT-IN LITHIUM BATTERY

2.5.1. Charging the Built-in Lithium Battery

The internal clock works even when the Movie Camera is turned off, and it consumes power from the built-in lithium battery. When the Movie Camera is in operation, it automatically charges this battery.

However, if the Movie Camera is not used for a very long time, the lithium battery can become discharged.
This has occurred if the Indication in the Finder flashes when you turn on the Movie Camera. In this case, perform the following operations.

Indication in the Finder flash	

2.5.2. Charging the Built-in Lithium Battery and Other Required Operations

1. Connect the AC Adaptor to the mains and to the Movie Camera.
2. Leave the Movie Camera turned off.

   - Although charging the lithium battery is possible with the Movie Camera turned on or off, we recommend to keep it turned off to conserve energy.

3. Leave the Movie Camera in this condition for approximately 4 hours.

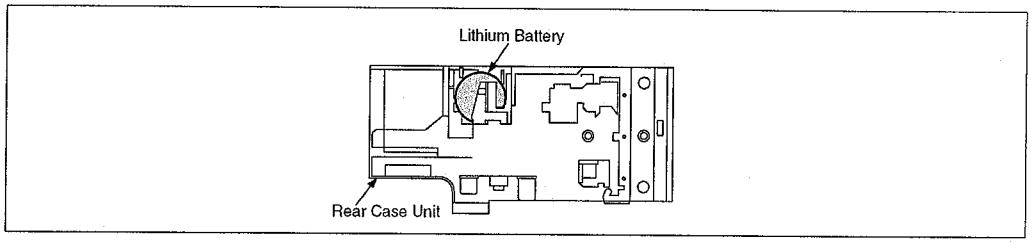
   - Charging the lithium battery in this way for 4 hours maintains the clock operation for approximately 6 months, charging for 26 hours (full charge) maintains it for approximately 2 year.

4. Set the clock to the current date and time.

2.6. HOW TO REPLACE THE LITHIUM BATTERY (PROCEDURE)

1. Remove the Rear Case Unit.
   (Remove the 1 Screw from Rear Case Unit)
2. Remove the Lithium Battery "ML2020" and then replace the new one. (See Fig. B1)

Fig. B1



Note:

The lithium battery is a critical component (Type No.: ML2020 Manufactured by Panasonic.)
It must never be subjected to excessive heat or discharge.
It must therefore only be fitted in equipment designed specifically for its use.

Replacement batteries must be of the same type and manufacture. They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.
Do not attempt to re-charge the old battery or re-use it for any other purpose.
It should be disposed of in waste products destined for burial rather than incineration.

CAUTION
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the equipment manufacturer.
Discard used batteries according to manufacturer's instructions.

VARNING
Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens instruktion.

ADVARSEL!
Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

2.7. 0 LUX NIGHT VIEW FUNCTION

2.7.1. General Description

This movie camera has new function, it is 0 Lux Night View Function. This function is convenient when the recording at night in places without any illumination. In this mode, the Movie Camera emits infrared rays which makes it possible to record object that are invisible to the naked eye.

2.7.2. Operation

Set the [0 LUX ON/OFF] Switch to [ON] to make the [0LUX] indication appear.

2.7.3. 0 Lux Shooting Structure

NOTE:

When the 0 Lux Night View mode is activated, it is not possible to use any of the Programme AE Modes and Iris is opened.

3. SERVICE INFORMATION

3.1. SERVICE INFORMATION DISPLAY (GENERAL DESCRIPTION)

- This Movie Camera has SERVICE INFORMATION DISPLAY function which facilitates quick trouble-shooting.
- You can turn on the Service Information Display, by performing the following procedures.
- This causes the Service Information to be displayed on the EVF. (There are 4 kinds of SERVICE MODE, as shown below.) In the OSD Line Output Mode, service Information can also be viewed on the TV.

MODE NAME	FUNCTION	How to turn it ON. (Push following keys simultane at least 2 sec.)		
OSD Line Output MODE	-Checking the EVF information on the TV monitor.	DATE/TIME SET (TOP PANEL)	RESET (TOP PANEL)	DA (T

MODE NAME	FUNCTION	How to turn it ON. (Push following keys simultane at least 2 sec.)		
SERVICE MODE 1	-Remaining Battery A/D Value -Safety Device -Capstan/Cylinder injuctions	DATE/TIME SHIFT (TOP PANEL)	RESET (TOP PANEL)	DA (T

MODE NAME	FUNCTION	How to turn it ON. (After chosing SERVICE MODE Push [DATE/TITLE] key. (TOP P
SERVICE MODE 2	-Reference Voltage A/D Value -Mechanism position -Serial key code	DATE/TITLE

MODE NAME	FUNCTION	How to turn it ON. (After chosing SERVICE MODE Push [DATA/TITLE] key. (TOR P
SERVICE MODE 3	-ERROR CODE Display	DATE/TITLE

MODE NAME	FUNCTION	How to turn it ON. (After chosing SERVICE MODE Push [DATE/TITLE] key. (TOP P
SERVICE MODE 4	-PG SHIFTER ADJUSTMENT	DATE/TITLE

3.2. ERROR CODE DISPLAY

When undesirable conditions occur, the "ERROR CODE" will automatically be displayed on the EVF, Aloso the CAMERA LED will flash for a short time, then the power will be turned off. / By turning on Service Mode 3, you can check to see what kind of undesirable condition occured, even after the ERROR CODE has disappeared. (To perform the Service Mode 3, do not disconnect the AC adaptor or battery pack, after undesiable condition occured.) / To clear the ERROR CODE, disconnect the AC Main Lead or the battery has been disconnected.
This movie camera has the built in Rechargeable Lithium Battery.
It maintain the operation of the built-in clock and error code for the Service Mode when the Movie camera turn off.
To clear the error code, make shoot the IC6003 pin 57 to GND for reset the IC6003.
Indication for built in clock return to initial condition make reset the IC6003.

NOTE1:
Contents of all Service Mode (Service Mode 1-Service Mode 4) same as privious models.
So we will issure Technical Information for Service Mode.
Order Number for this document is as follows.
Order Number for Technical Information : VMD9512M138

NOTE2:
Contents of all Service Mode (Service Mode 1- Service Mode 4) same as privious models.
We will issure Technical information for Service Mode.
But Service Mode 3 is Error code Display. It is important for Service.
So this service manual contain for this information.

3.3. SERVICE MODE 3

- **After undesirable conditions occured, you can see what kind of error occured by turning on the Service Mode 3.**
- **When you turn on the service mode 3, the error code is displayed on EVF.**
- **Also the Camera LED is flashed according to Error code.**

Display:
(Example)

(SERVICE MODE 3)

F 05

F 05

* Detected the Cylinder lock

Display position:
(See Fig. 1)

0 : 0 0 0 0 (The position of linear time counter)
Blank(No display)
01~05, 10~11, 51,52
F or U

Fig. 1 (Error Code)

Display	Condition	The Power off timing
F01	T-REEL LOCK	After 1 minute (flashing the LED)
F02	S-REEL LOCK	
F03	UNLOADING LOCK	
F04	LOADING LOCK	
F05	CYLINDER LOCK	
F51	FOCUS MOTOR LOCK	
F52	ZOOM MOTOR LOCK	
U10	DEW DETECTION	After 18 minutes (flashing the LED)
U20	HEAD CLOGGING	Not turning off

Fig. 2 (LED Flashing Timing)

Lock Condition	Power LED Flashing Timing
T-REEL LOCK (F01)	↔2.56 sec
S-REEL LOCK (F02)	↔0.16 sec
UNLOADING LOCK (F03)	
LOADING LOCK (F04)	
CYLINDER LOCK (F05)	
OTHERS (U10&U11)	Power LED is flashed at 1 Hz timing

4. GENERAL DESCRIPTIONS

5. ADJUSTMENT PROCEDURES

5.1. DISASSEMBLY PROCEDURES

Flow-Chart for Disassembly Procedure

No.	Item/Part	Fig.	Removal (Screw)
1	Side Case (L) Unit	Fig. 1	1-Screw (A) 2-Screws (B)
		Fig. 2	7-Screws (C)
		Fig. 3	2-Locking Tabs (a) Slightly open the Side Case (L) Unit. Disconnect P1001 and FP6004.
2	EVF Unit	Fig.4	4-Locking Tabs (b)
3	Cassette Cover Unit	Fig 5	2-Screws (D)
4	Side Case (R) Unit with Top Operation Panel Unit	Fig. 6	2-Screws (E) 4-Locking Tabs (c) Slightly open the Side Case (R) Unit with Top Operation Panel Unit. Disconnect FP6003 and FP6006.
5	Front Case Unit	Fig. 6 Fig. 7	3-Locking Tabs (d) Disconnect FP4002.
6	Rear Case Unit	Fig. 7	1-Screw (F) Disconnect PS1003 and PS3009. 1-Locking Tab (e)
7	Camera/Main C.B.A.	Fig. 7	1-Screw (G) 2-Screws (H) / Remove the Shield Case. Disconnect the following connectors ; FP5001, FP6001, FP6002, PP301, FP2001, FP2002, FP701, FP6005, / FP4001, FP4002
8	Lens Unit	Fig. 8	2-Screws (I)
9	Mechanism Unit	Fig. 8	1-Screw (J) 1-Screw (K)
10	Mic Unit	Fig. 9	4-Screws (L) / Disconnect P6802.

No.	Item/Part	Fig.	Removal (Screw)
11	Eye Cap Unit	Fig. 10	Turn the Eye Cap Unit counterclockwise and remove it.
12	E.V.F. C.B.A.	Fig. 11	Turn the EVF Fixing Piece clockwise until you can see a Screw (M). 3-Locking Tabs (f)

Fig. 1

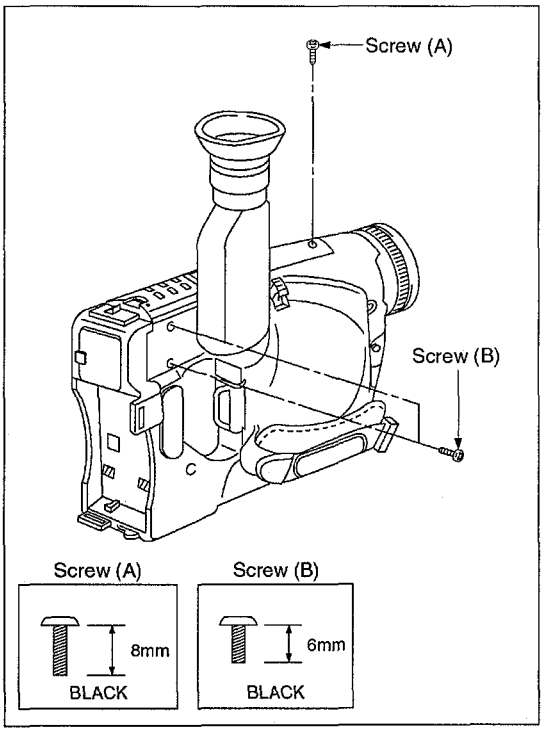


Fig. 2

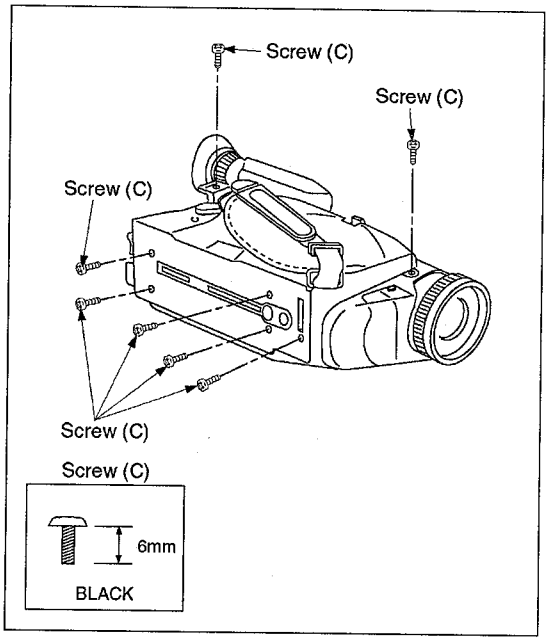

Screw (C)
Screw (C)
Screw (C)
Screw (C)
Screw (C)
6mm
BLACK

Fig. 3

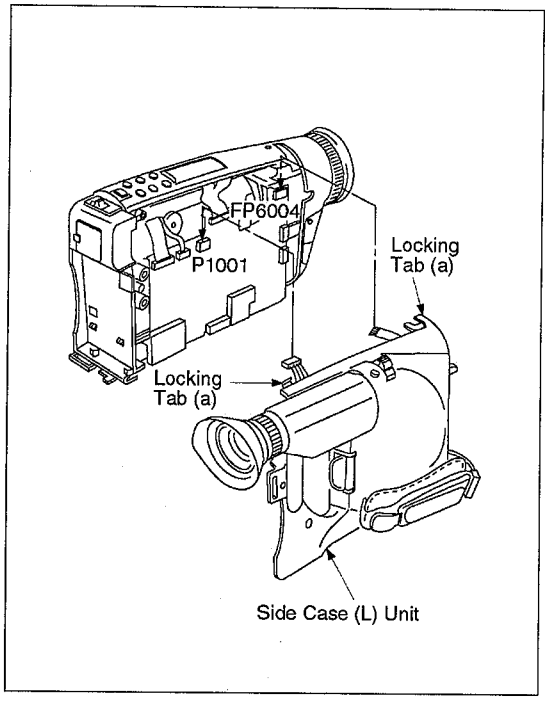

FP6004
P1001
Locking
Tab (a)
Locking
Tab (a)
Side Case (L) Unit

Fig.4

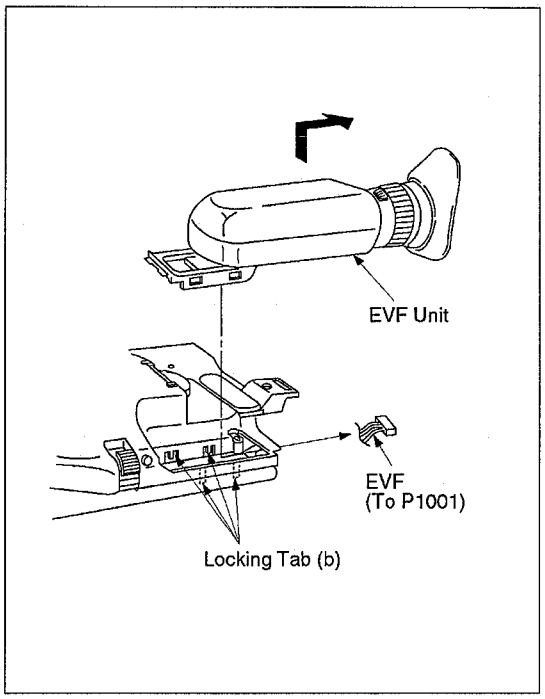

EVF Unit
EVF
(To P1001)
Locking Tab (b)

Fig 5

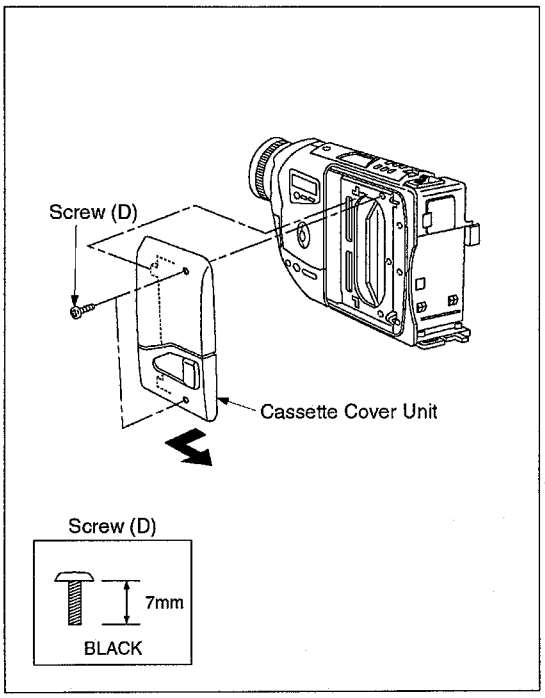

Screw (D)
Cassette Cover Unit
Screw (D)
7mm
BLACK

Fig. 6

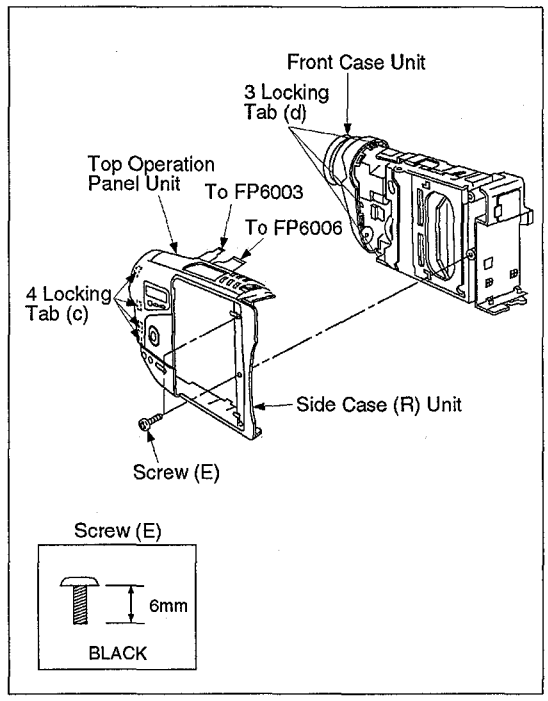

Front Case Unit
3 Locking Tab (d)
Top Operation Panel Unit
To FP6003
To FP6006
4 Locking Tab (c)
Side Case (R) Unit
Screw (E)
Screw (E)
6mm
BLACK

Fig. 7

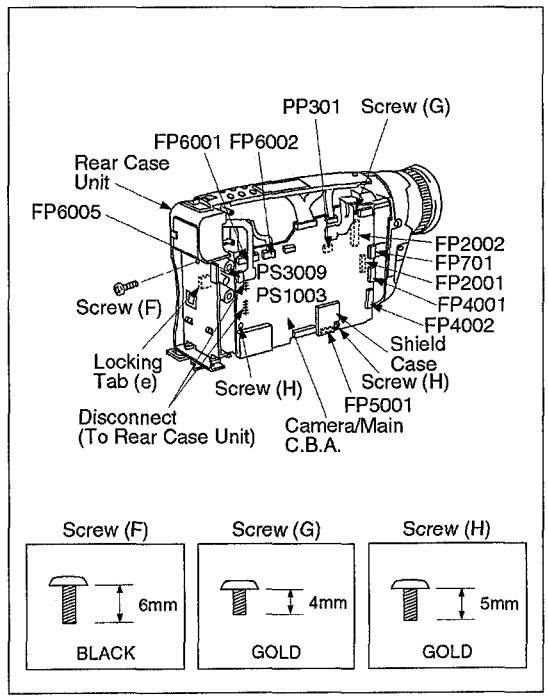
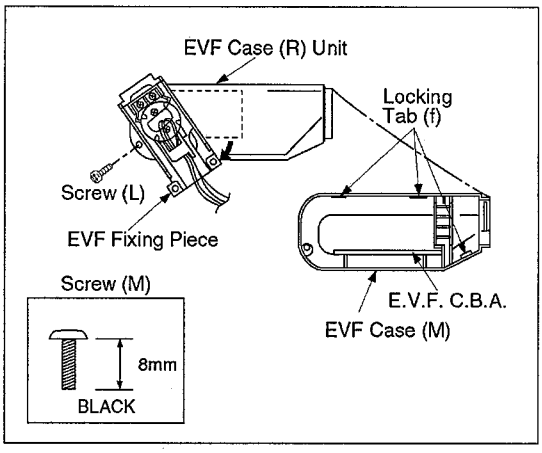

PP301
Screw (G)
FP6001 FP6002
Rear Case Unit
FP6005
FP2002
FP701
FP2001
FP4001
FP4002
PS3009
PS1003
Screw (F)
Shield Case
Locking Tab (e)
Screw (H)
Screw (H)
FP5001
Disconnect (To Rear Case Unit)
Camera/Main C.B.A.
Screw (F)
6mm
BLACK
Screw (G)
4mm
GOLD
Screw (H)
5mm
GOLD

Fig. 8

Fig. 11



5.2. ELECTRICAL ADJUSTMENT PROCEDURE FOR EVF SECTION

5.2.1. ADJUSTMENT PROCEDURE

The following Equipment are required for adjustment of the Viewfinder.

1. Chart: Ball chart/Registration chart/Gray Scale chart.

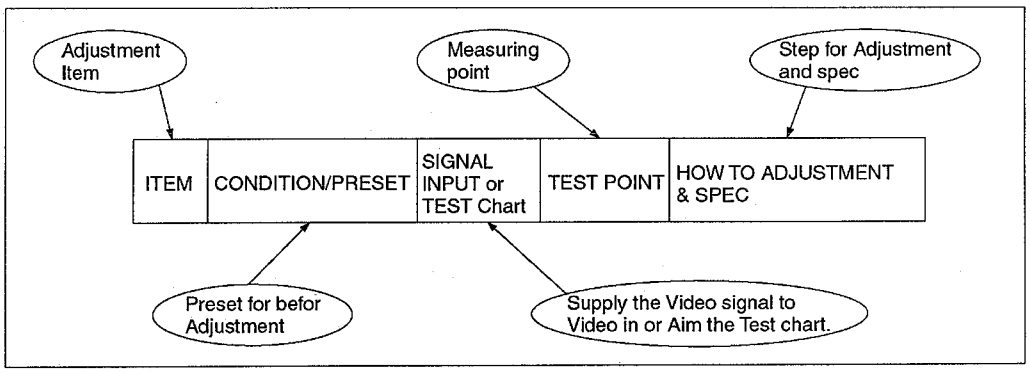
2. Tools: Plastic Tip driver

The following adjustment are Electric Viewfinder.

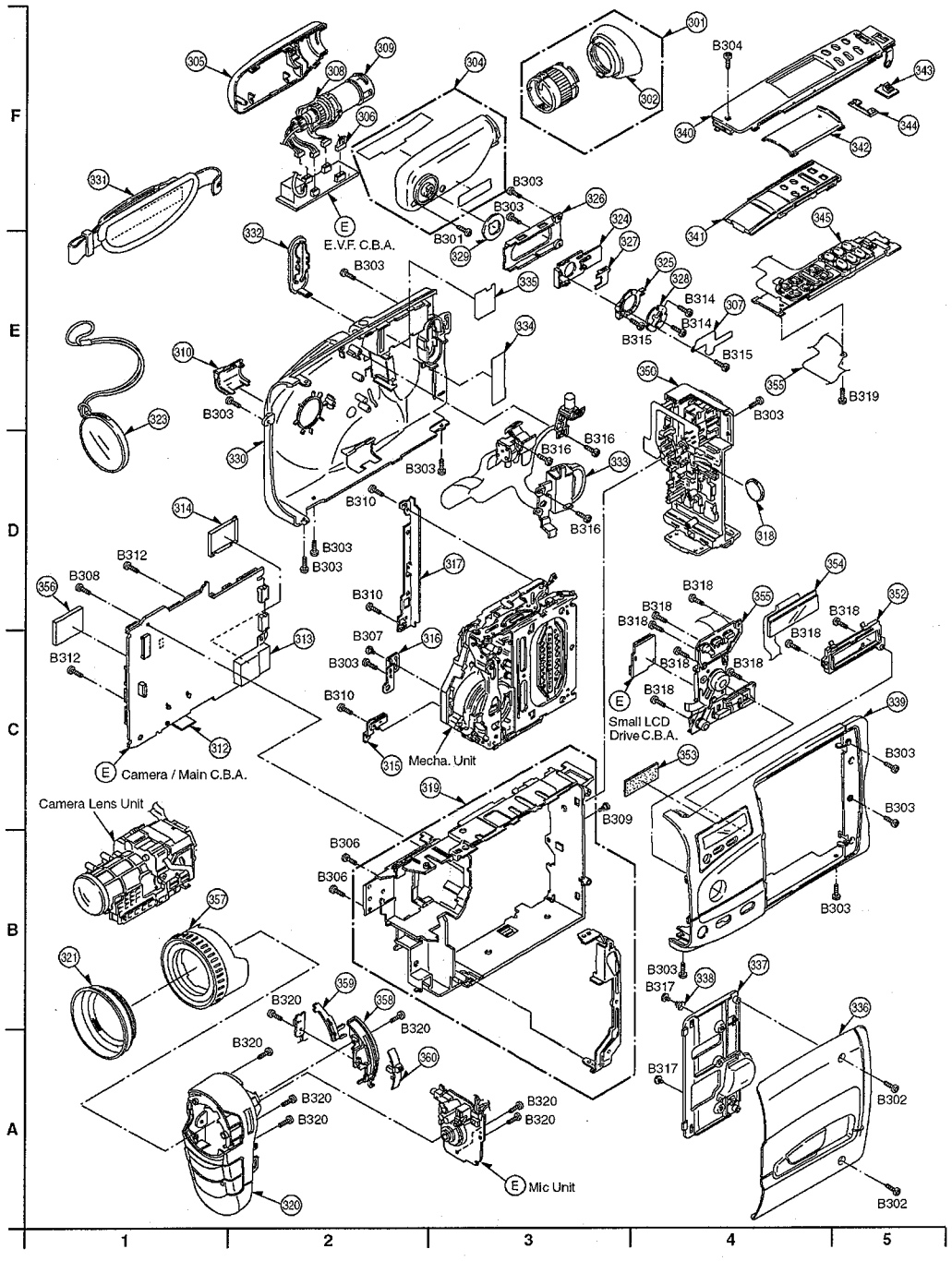
1. Remove the E.V.F. Unit from Side Case (L).
(Remove the 2 Screws from Side Case (L).)

2. Turn the E.V.F. Fixing Piece clockwise until you can see a 1 Screw and Unlock the 3 Locking tabs.
(Please refer to Fig. E1 (PREPARATION).)

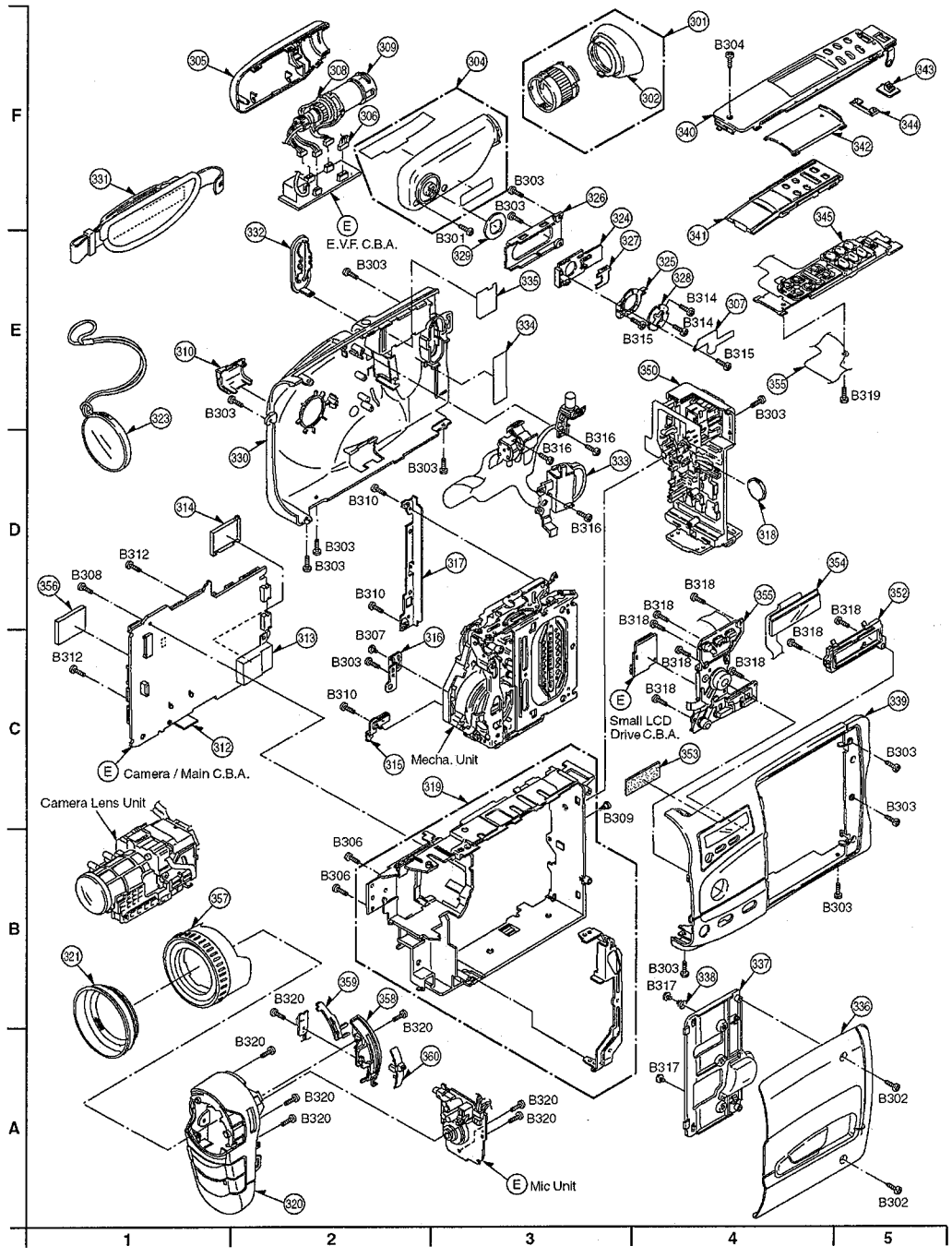
How to read the Adjustment Procedure.



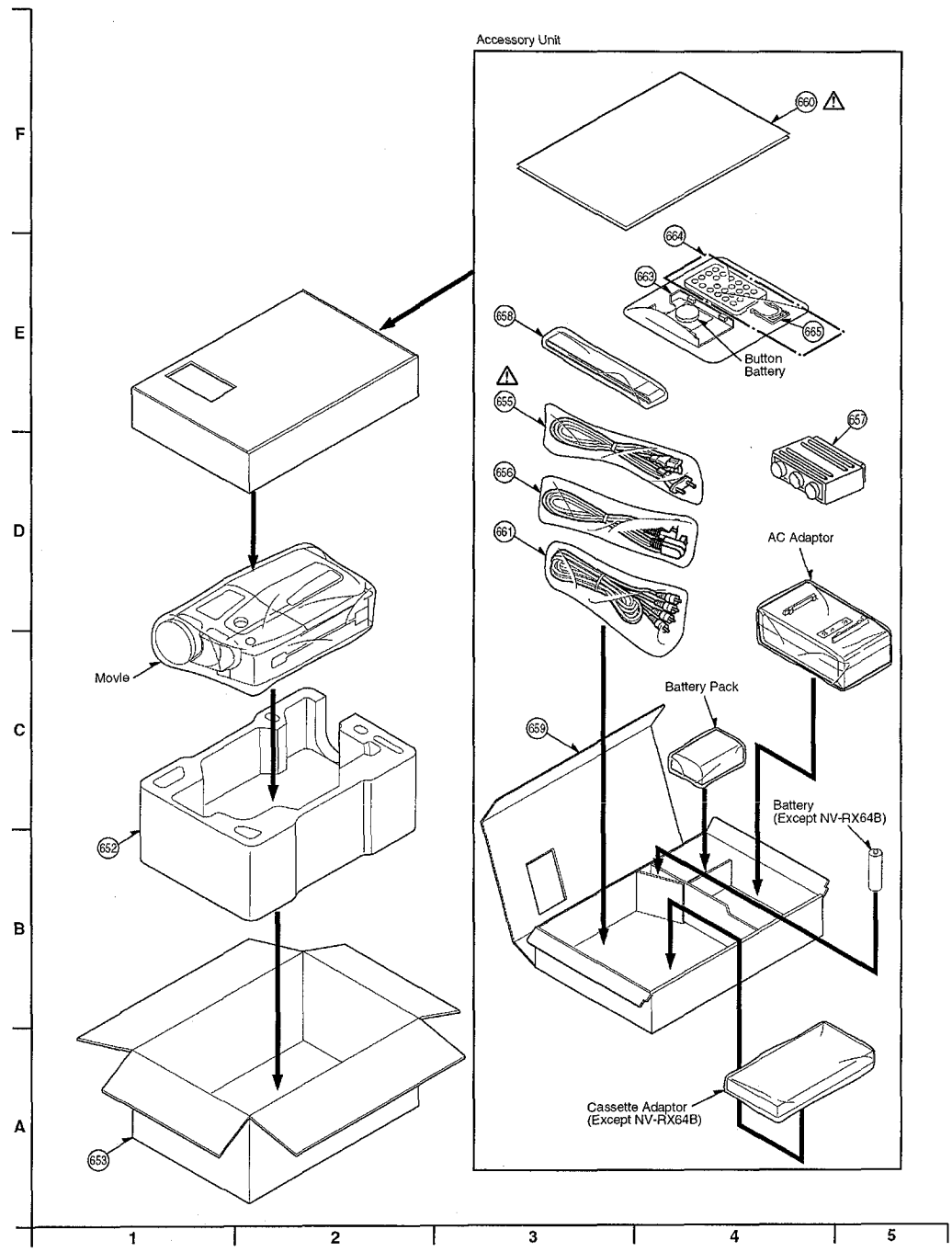
5.2.2. ELECTRICAL ADJUSTMENT FOR EVF SECTION



11.6. PACKING PARTS & ACCESSORIES SECTION



11.6. PACKING PARTS & ACCESSORIES SECTION



12. REPLACEMENT PARTS LIST

12.1. VTR MECHANISM SECTION (1) PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

ITEM	CONDITION/PRESET	SIGNAL INPUT or TEST Chart	TEST POINT	HOW TO ADJUSTMENT
1 CENTERING	Aim the Camera at Registration chart.	Registration Chart	EVF on Screen	Adjust the deflection-yoke c magnet turning so that pictu is centerd. Please refer to Fig. E2 (CEN ADJUSTMENT).
2 FOCUS	Aim the Camera at Ball Chart.	Ball Chart	EVF on Screen	Adjust the VR803 for best re in the Viewfinder. After performed this adjust confirm "A" Part of VR803. "A" part is outside of 100 de Please refer to Fig. E3 (FOC ADJUSTMENT).
3 VERTICAL SIZE	Aim the Camera at Gray Scale Chart.	Gray Scale Chart	EVF & TV on Screen	Adjust the VR801 for best ve (Picture does not roll as sho E4 (VERTICAL ADJUSTMEN
4 BRIGHTNESS	Aim the Camera at Gray Scale Chart.	Gray Scale Chart	EVF & TV on Screen	Adjust the VR804 so brightn viewfinder is same as monit

5.2.3. HOW TO ADJUSTMENT

Fig. E1 (PREPARATION)

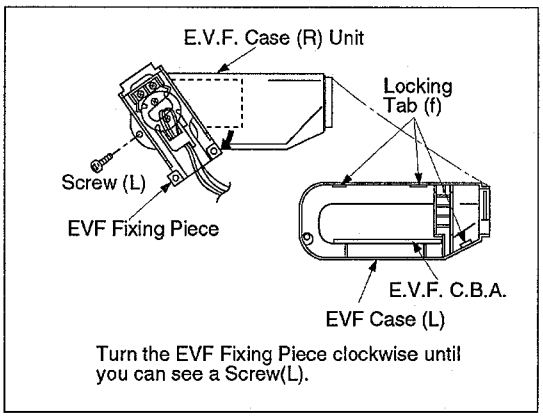

E.V.F. Case (R) Unit
Locking Tab (f)
Screw (L)
EVF Fixing Piece
E.V.F. C.B.A.
EVF Case (L)
Turn the EVF Fixing Piece clockwise until you can see a Screw(L).

Fig. E2 (CENTER ADJUSTMENT)

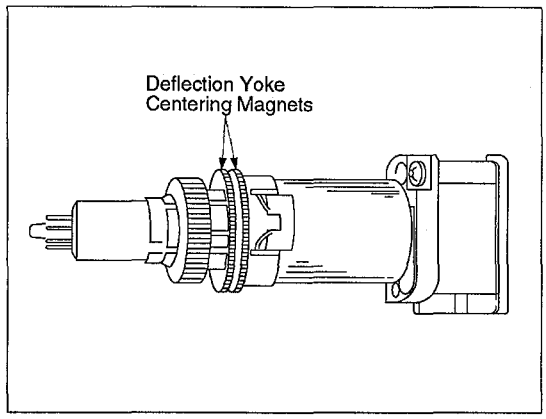


Fig. E3 (FOCUS ADJUSTMENT)

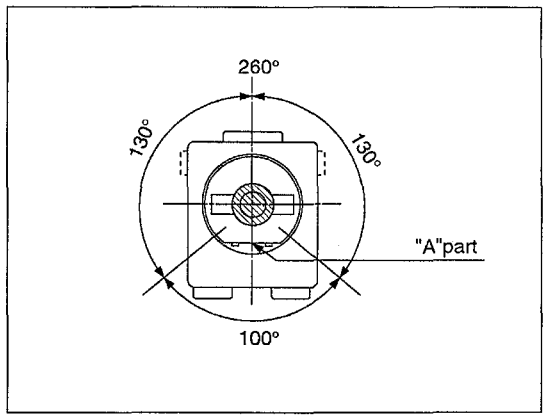
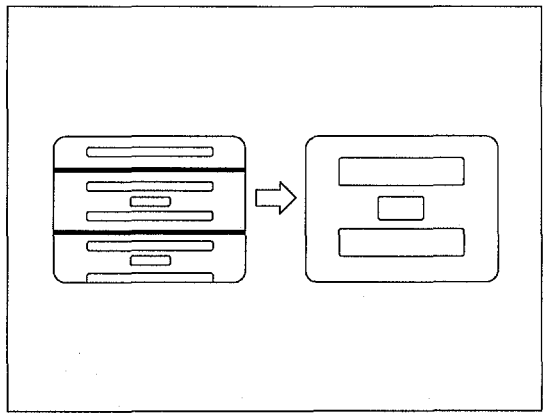
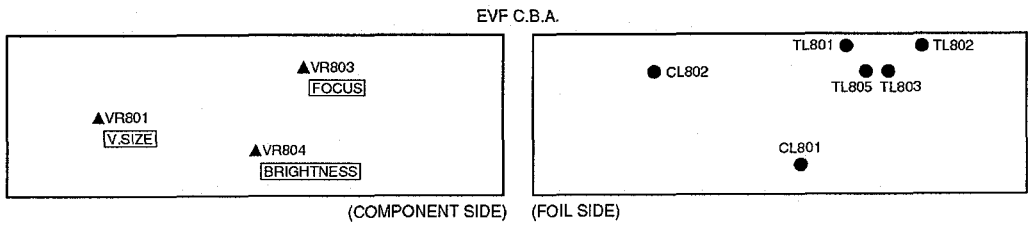


Fig. E4 (VERTICAL ADJUSTMENT)



5.2.4. LOCATION OF TEST POINTS & CONTROLS



5.3. DISASSEMBLY PROCEDURES OF LENS UNIT

- The following flowchart describes order or steps for removing the

lens units and certain printed circuit boards in order to make access to the item needing service.

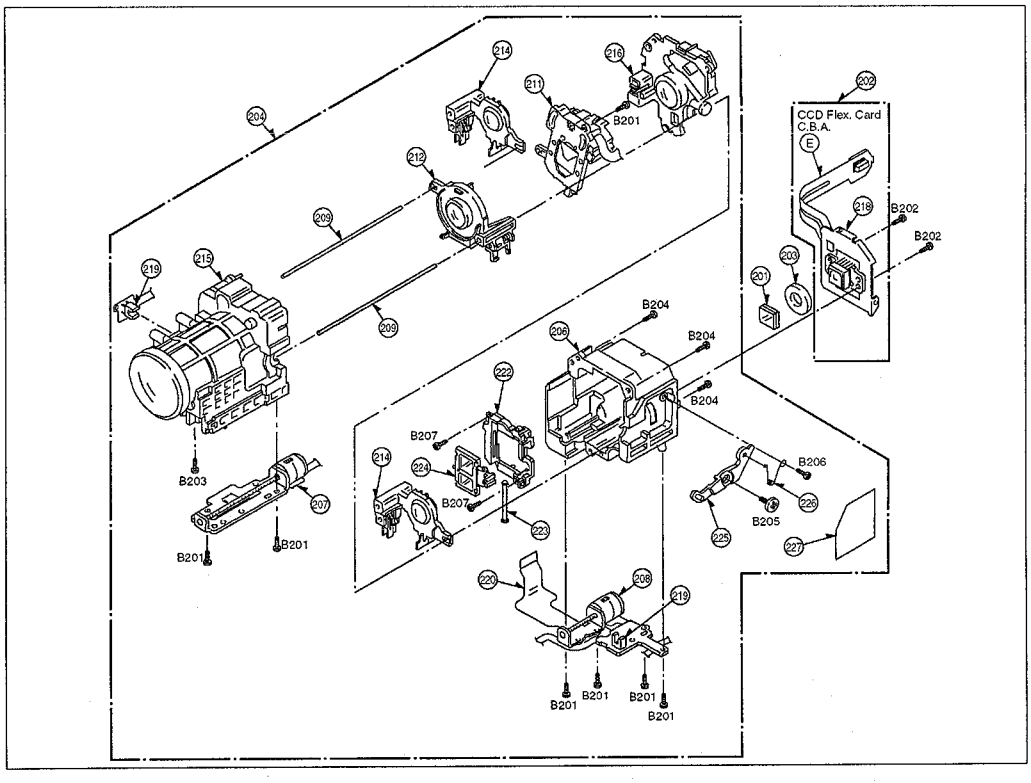
- To reassemble the unit follow the steps in reverse order.

Fig. L1

1. CCD Unit	Ref.No. 202
2. CCD Cushion & Crystal Filter	Ref.No. 203/201
3. Zoom Motor Unit	Ref.No. 207
4. Focus Motor Unit	Ref.No. 208
5. Lens Flex. Card C.B.A.	———
6. Master Flange/4th Moving Frame Unit/ 3rd Lens Frame Unit	Ref.No. 206/214/216
7. Iris Unit	Ref.No. 211
8. Guide Pole	Ref.No. 209
9. 2nd Moving Frame Unit	Ref.No. 212

Note: Each Ref.-numbers are equivalent to number on Fig. L2 and Parts-List.

Fig. L2



6. ABBREVIATIONS

7. WAVEFORM TABLE

8. BLOCK DIAGRAMS

8.1. LUMINANCE/CHROMINANCE BLOCK DIAGRAM

8.2. CAMERA BLOCK DIAGRAM

8.3. SYSTEM CONTROL & SERVO/POWER BLOCK DIAGRAM

8.4. SYSTEM CONTROL & SERVO DC VOLTAGE CHART (SP MODE)

9. SCHEMATIC DIAGRAM

9.1. SYSTEM CONTROL & SERVO SCHEMATIC DIAGRAM

9.2. CAMERA SCHEMATIC DIAGRAM

9.3. LUMINANCE/CHROMINANCE & AUDIO SCHEMATIC DIAGRAM

9.4. SUB SERVO SCHEMATIC DIAGRAM

9.5. POWER SCHEMATIC DIAGRAM

9.6. LENS DRIVE SCHEMATIC DIAGRAM

9.7. E.V.F. SCHEMATIC DIAGRAM

9.8. SMALL LCD DRIVE & CAMERA OP.U. SCHEMATIC DIAGRAM

9.9. MIC UNIT SCHEMATIC DIAGRAM

9.10. CCD FLEX. CARD SCHEMATIC DIAGRAM

10. CIRCUIT BOARD ASSEMBLIES

10.1. CAMERA/MAIN C.B.A. ADDRESS INFORMATIONS

10.2. CAMERA/MAIN [COMPONENT SIDE] C.B.A. (VEP23474C)

10.3. CAMERA/MAIN [FOIL SIDE] C.B.A. (VEP23474C)

10.4. SMALL LCD DRIVE C.B.A. (VEP00Z89A)

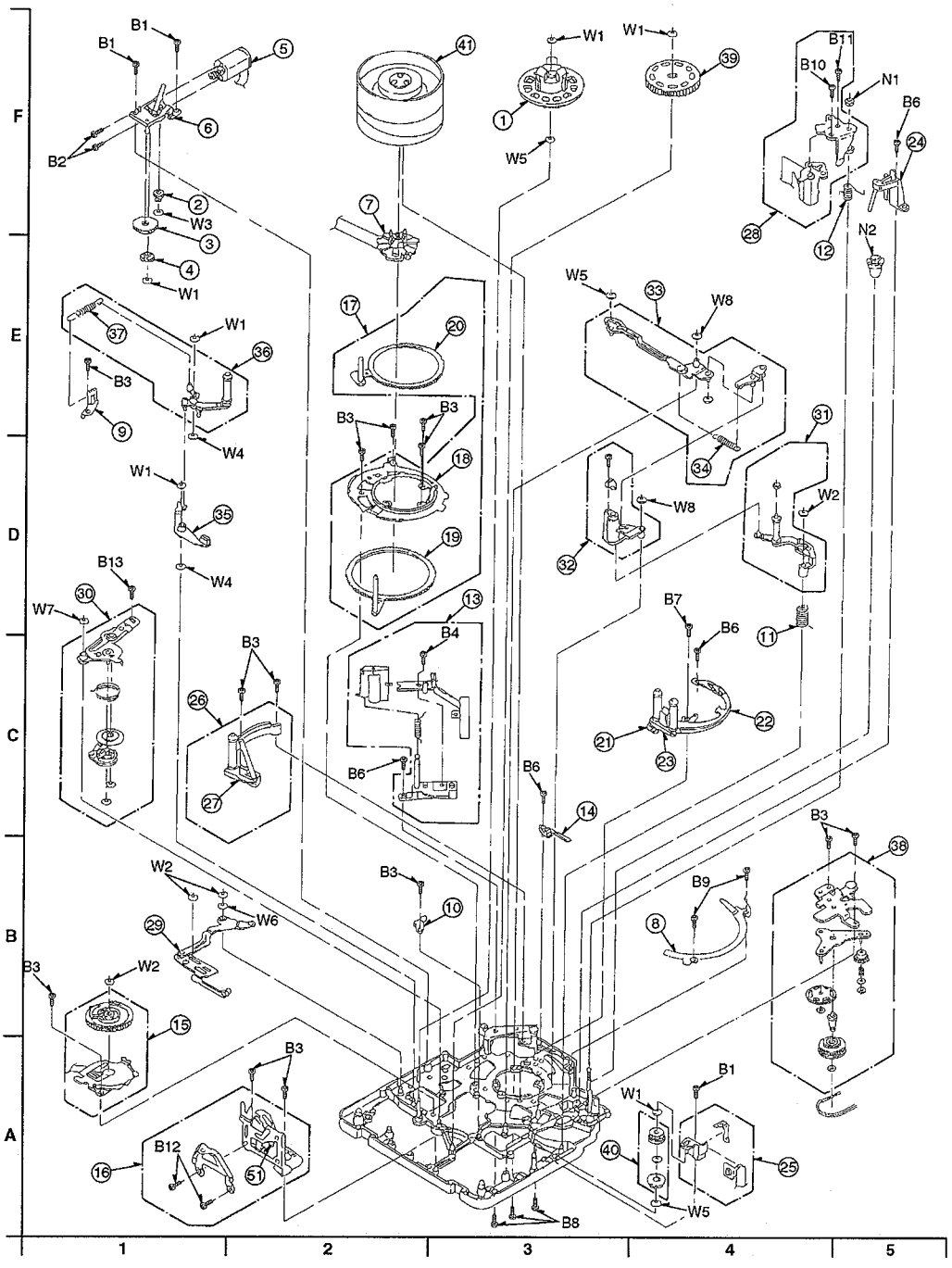
10.5. MIC UNIT (VEK8615)

10.6. CCD FLEX. CARD C.B.A. (VEP22276A)

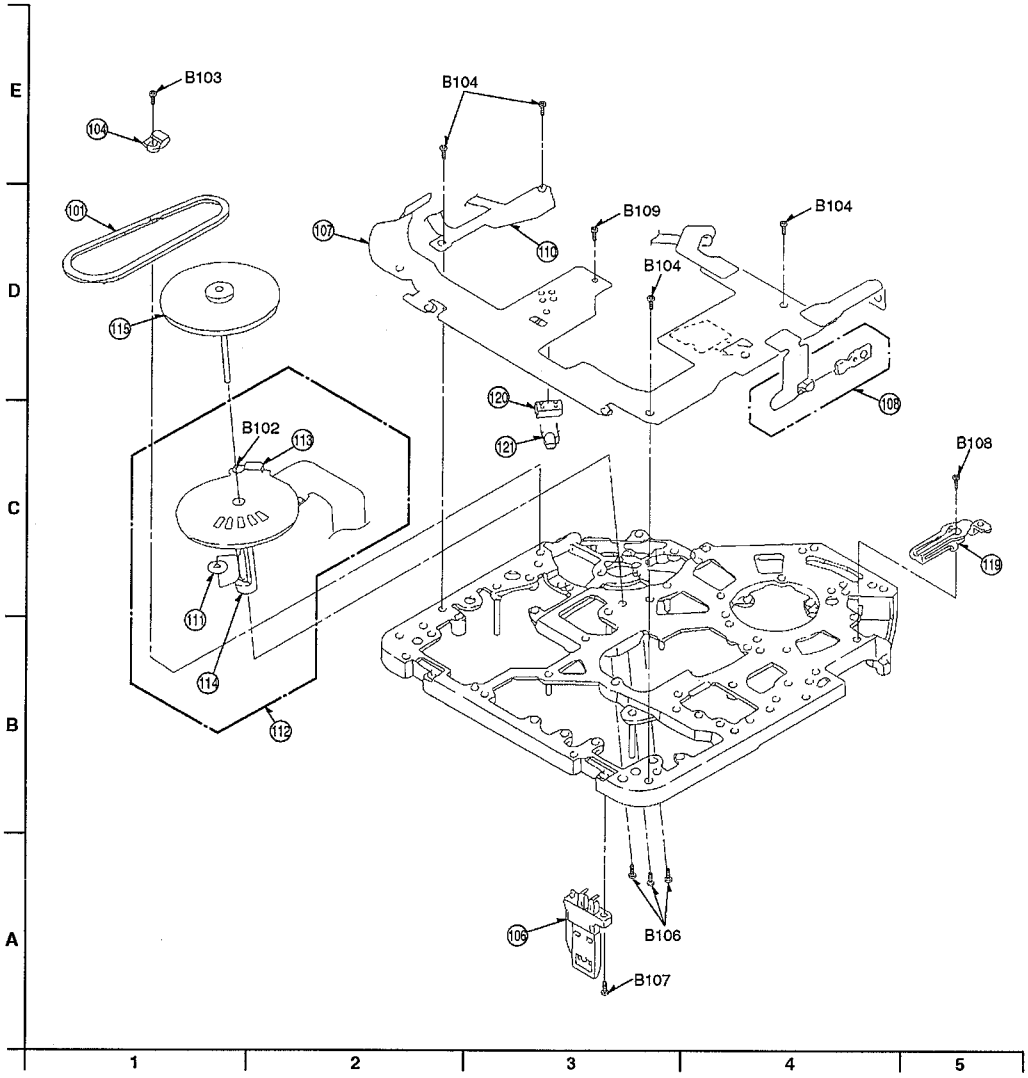
10.7. E.V.F. C.B.A. (VEP28259A)

11. EXPLODED VIEWS

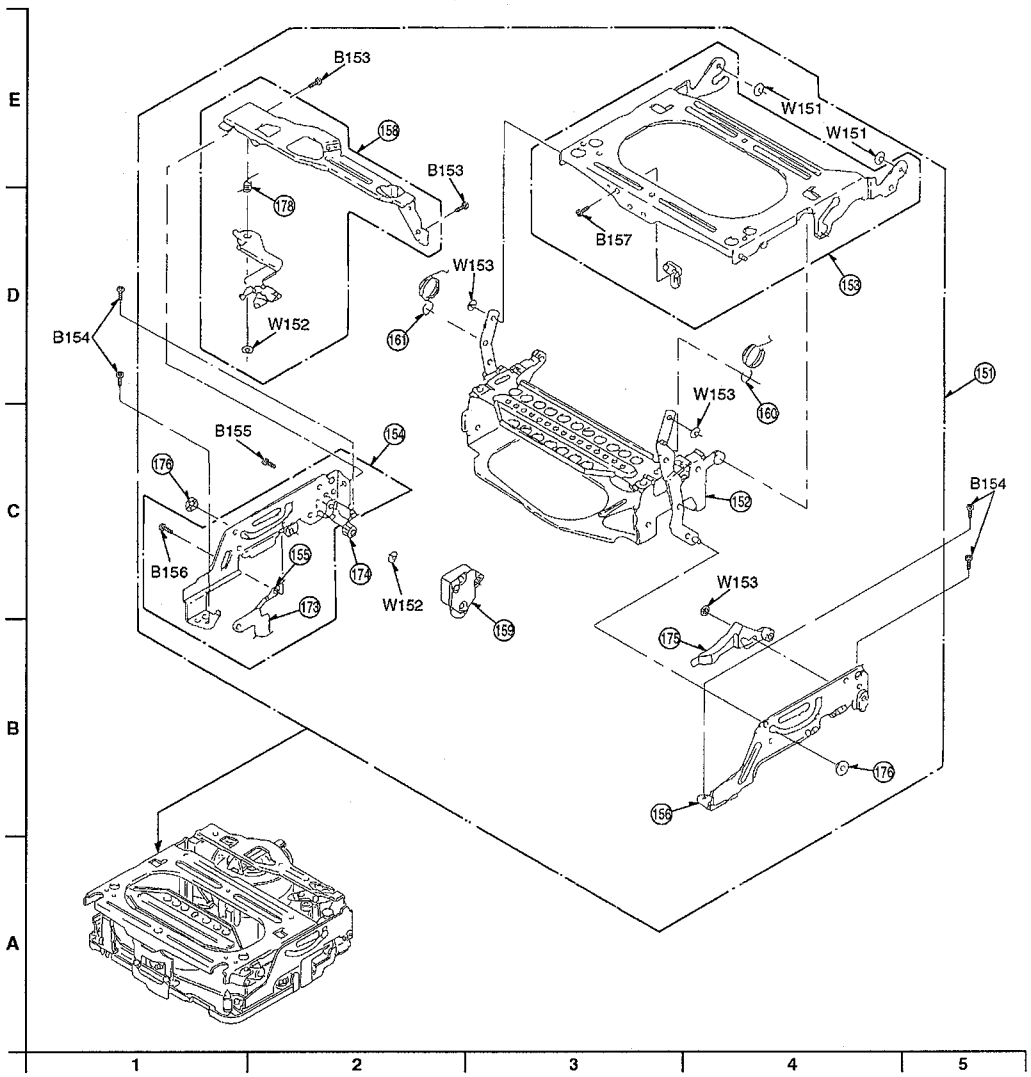
11.1. VTR MECHANISM SECTION (1)



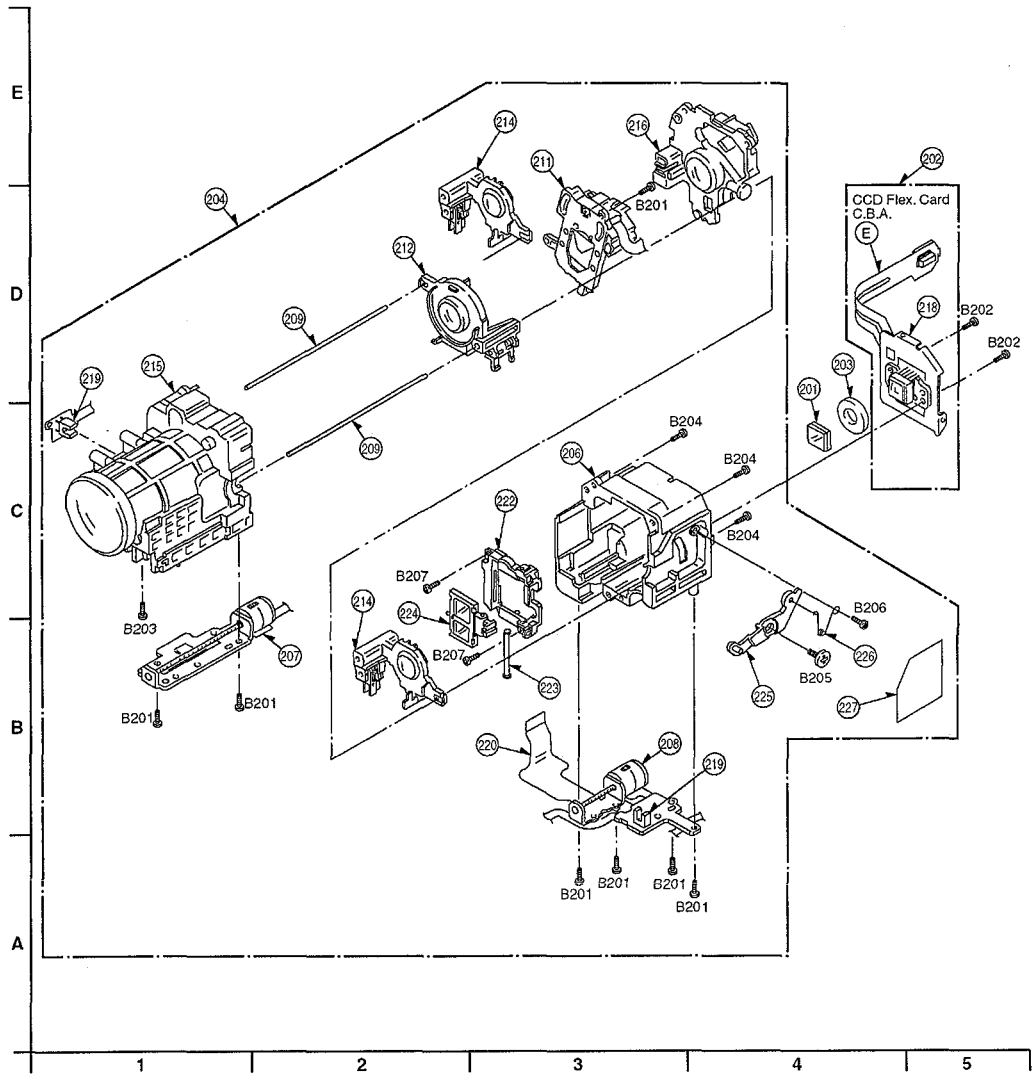
11.2. VTR MECHANISM SECTION (2)



11.3. VTR MECHANISM SECTION (3)



11.4. CAMERA LENS SECTION



11.5. FRAME & CASING SECTION

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	1 (1)	VDR0226	REEL BASE (S)	1	
	2 (1)	VDG0821	BRAKE GEAR (A)	1	
	3 (1)	VDG0823	BRAKE GEAR (C)	1	
	4 (1)	VDG0822	BRAKE GEAR (B)	1	
	5 (1)	VEM0417	LOADING MOTOR (1) U.	1	
	6 (1)	VXA4527	MOTOR HOLDER U.	1	
	7 (1)	VEK8368	RT CONNECTOR U.	1	
	8 (1)	VMA8502	T-RING SLIDER	1	
	9 (1)	VMA8505	TEN-REG.SPRING HOOK	1	
	10 (1)	VMA8532	PENDULUM ARM HOLDER	1	
	11 (1)	VMB2362	T3 ARM SPRING	1	
	12 (1)	VMB2365	AC HEAD SPRING	1	
	13 (1)	VXA5306	S-GUIDE STAND U.	1	
	14 (1)	VMD1851	T-BOAT GUIDE	1	
	15 (1)	VSR0096	MODE SWITCH U.	1	
	16 (1)	VXA6118	LOCK BASE U.	1	
	17 (1)	VXA4517	LOADING RING U.	1	
	18 (1)	VMD1824	RING GUIDE	1	
	19 (1)	VXA4518	T-RING U.	1	
	20 (1)	VXA4519	S-RING U.	1	
	21 (1)	VEK5549	LED U.	1	
	22 (1)	VMD1828	T-RAIL	1	
	23 (1)	VXA5260	T-BOAT U.	1	
	24 (1)	VXA4528	T4 POST U.	1	
	25 (1)	VXA6117	T-REEL SENSOR U.	1	
	26 (1)	VXA5153	S-RAIL U.	1	
	27 (1)	VXA5124	S-BOAT U.	1	
	28 (1)	VXA5201	AC HEAD U.	1	
	29 (1)	VXL2393	EJECT LEVER (1) U.	1	
	30 (1)	VXL2401	SWING ARM U.	1	
	31 (1)	VXL2431	T3 ARM (A) U.	1	
	32 (1)	VXL2139	PINCH ARM U.	1	
	33 (1)	VXL2140	PINCH DRIVE ARM U.	1	
	34 (1)	VMB2363	PINCH PRESSURE SPRING	1	
	35 (1)	VXL2144	PAD ARM U.	1	
	36 (1)	VXL2145	TEN-REG. ARM U.	1	
	37 (1)	VMB2364	TEN-REG. SPRING	1	
	38 (1)	VXL2399	IDLER U.	1	
	39 (1)	VXP1308	RELAY GEAR U.	1	
	40 (1)	VXP1313	T-DRIVE GEAR U.	1	
	41 (1)	VEG1485	CYLINDER U.	1	NV-RX67EG/E
	41 (1)	VEG1486	CYLINDER U.	1	NV-RX64B
	51 (1)	VMB2369	LOCK SPRING	1	
	B1 (1)	XQN14+B25FY	SCREW	3	
	B2 (1)	XQN14+A14	SCREW	2	
	B3 (1)	XQN14+B2	SCREW	13	
	B4 (1)	XQN14+BJ35	SCREW	1	
	B6 (1)	XQN14+CF4	SCREW	4	
	B7 (1)	XQN14+C5	SCREW	1	
	B8 (1)	XQN14+C35R	SCREW	3	
	B9 (1)	VHD0711	SCREW	2	
	B10 (1)	VHD0700	SCREW	1	
	B11 (1)	VHD0699	SCREW	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	B12 (1)	XQN14+C2	SCREW	2	
	B13 (1)	VHD0707	SCREW	1	
	N1 (1)	VHN0047	NUT	1	
	N2 (1)	VHN0175	NUT	1	
	W1 (1)	VMX2027	WASHER	6	
	W2 (1)	VMX2026	WASHER	4	
	W3 (1)	VMX2051	WASHER	1	
	W4 (1)	XWGV12Z3G	WASHER	2	
	W5 (1)	XWGV12Y3G	WASHER	3	
	W6 (1)	XWGV0007	WASHER	1	
	W7 (1)	VMX2366	WASHER	1	
	W8 (1)	VMX2359	CUT WASHER	2	

12.2. VTR MECHANISM SECTION (2) PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	101 (2)	VDV0232	CAPSTAN BELT	1	
	104 (2)	VMD1846	CAPSTAN STOPPER	1	
	106 (2)	VSH0065	REC SAFETY SW U.	1	
	107 (2)	VWJ0878	MECH.FLEXIBLE CARD	1	
	108 (2)	VXA4511	PHOTO (L) U.	1	
	110 (2)	VXA4997	T-REEL SENSOR U.	1	
	111 (2)	VDB1129	LOWER BEARING	1	
	112 (2)	VEK7314	STATOR U.	1	
	113 (2)	VBK0059	MR HEAD	1	
	114 (2)	VXD0134	HOUSING U.	1	
	115 (2)	VXP1303	ROTOR U.	1	
	119 (2)	VMP4923	H.A. EARTH PLATE	1	
	120 (2)	VMD1842	REEL SENSOR MOUNT	1	
	121 (2)	0N2170-LM	REEL SENSOR	1	
	B102 (2)	VHD0593	SCREW	1	
	B103 (2)	XQN14+B25FY	SCREW	1	
	B104 (2)	XQN14+C2R	SCREW	4	
	B106 (2)	XQN14+A3	SCREW	3	
	B107 (2)	XQN14+CF4	SCREW	1	
	B108 (2)	XQN14+C2	SCREW	1	
	B109 (2)	VHD0875	SCREW	1	

12.3. VTR MECHANISM SECTION (3) PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	151 (3)	VXA5725	GARAGE U.	1	
	152 (3)	VXA5199	HOLDER U.	1	
	153 (3)	VXA4863	GARAGE (1) U.	1	
	154 (3)	VXA4510	STAND (L) U.	1	
	155 (3)	VXA4511	PHOTO (L) U.	1	
	156 (3)	VXA5000	STAND (R) U.	1	
	158 (3)	VXL2222	TAPE GUIDE U.	1	
	159 (3)	VXP1472	DUMPER	1	
	160 (3)	VMB2367	UP SPRING (R)	1	
	161 (3)	VMB2368	UP SPRING (L)	1	
	173 (3)	VWJ0548	PHOTO FLEX.CARD	1	
	174 (3)	VDG0827	DUMPER RELAY GEAR	1	
	175 (3)	VML2580	TAPE OPEN LEVER	1	
	176 (3)	VDP1406	ARM HOLDER	2	
	178 (3)	VMB2498	TAPE GUIDE SPRING	1	
	B153 (3)	XQN14+BF2	SCREW	2	
	B154 (3)	VHD0838	SCREW	4	
	B155 (3)	XQN16+AJ8	SCREW	1	
	B156 (3)	XQN14+CM2	SCREW	1	
	B157 (3)	XQS14+A25FZ	SCREW	1	
	W151 (3)	VMX1042	WASHER	2	
	W152 (3)	VMX1061	WASHER	2	
	W153 (3)	XWGV0006	WASHER	3	

12.4. CAMERA LENS SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	201 (4)	VDL0919	CRYSTAL FILTER	1	
	202 (4)	VEK8601	CCD U.	1	
	203 (4)	VMX2825	CCD CUSHION	1	
	204 (4)	VXW0437	LENS U.	1	
	206 (4)	VDW0616	MASTER FLANGE	1	
	207 (4)	VEM0642	ZOOM MOTOR U.	1	
	208 (4)	VEM0643	FOCUS MOTOR U.	1	
	209 (4)	VMS6423	GUIDE POLE	2	
	211 (4)	VXL2855	IRIS U.	1	
	212 (4)	VXP1925	2ND. MOVING FRAME U.	1	
	214 (4)	VXP1927	4TH. MOVING FRAME U.	1	
	215 (4)	VXQ0794	MAIN FRAME U.	1	
	216 (4)	VXQ0795	3RD. LENS FRAME U.	1	
	218 (4)	VSC4696	CCD SHIELD CASE	1	
	219 (4)	0N1004-R	PHOTO INTERRUPTER	2	
	220 (4)	VJB20772	FLAT CARD CABLE	1	
	222 (4)	VDW0618	F FIXING FRAME	1	
	223 (4)	VMS6494	F GUIDE POLE	1	
	224 (4)	VXQ0798	F FRAME U.	1	
	225 (4)	VML3386	LEVER	1	
	226 (4)	VMB3296	F SPRING	1	
	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	227 (4)	VZT0510	PROTECT SHEET	1	
	B201 (4)	XQN16+BJ5	SCREW	7	
	B202 (4)	XQN16+CJ6	SCREW	2	
	B203 (4)	VHD0852	SCREW	1	
	B204 (4)	XQN16+BJ8	SCREW	3	
	B205 (4)	VHD1234	SCREW	1	
	B206 (4)	VHD1233	SCREW	1	
	B207 (4)	XQN16+CJ5	SCREW	2	

12.5. FRAME & CASENG SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	301 (5)	VYK8075	FINDER CASE U.	1	
	302 (5)	VMG0631	EYE CAP	1	
	304 (5)	VYK8074	EVF CASE (R) U.	1	
	305 (5)	VKM4836	EVF CASE (L)	1	
	306 (5)	VEE0F07	CONNECTOR U.	1	
	307 (5)	VMZ2792	EVF ROTARY SEC. BARRIER	1	
	308 (5)	ELY05V584B	DY (DY801)	1	
	309 (5)	M01LGM07WB02	CRT (V801)	1	
	310 (5)	VKF2827	EVR COVER	1	
	312 (5)	VSC4600	H.A. SHIELD CASE	1	
	313 (5)	VSC4866	POWER SHIELD CASE (UPPER)	1	
	314 (5)	VSC4867	POWER SHIELD CASE (LOWER)	1	
	315 (5)	VMP4923	H.A. EARTH PLATE	1	
	316 (5)	VMP5560	MECH. SUPPORT PLATE (F)	1	
	317 (5)	VYQ1555	MECH. SUPPORT PLATE U.(R)	1	
	318 (5)	ML2020	LITHIUM BATTERY	1	
	319 (5)	VYQ1753	MAIN FRAME U.	1	
	320 (5)	VYK8851	FRONT CASE (1) U.	1	
	321 (5)	VDW0626	LENS HOOD	1	
	323 (5)	VYF2454	HOOD CAP U.	1	
	324 (5)	VGQ4716	SLIDE PIECE	1	
	325 (5)	VMC1381	EVF ROTATION SPRING	1	
	326 (5)	VGQ4749	EVF FIXING PIECE	1	
	327 (5)	VGQ4806	EVF WIRE COVER	1	
	328 (5)	VMP5574	EVF ROTATION PLATE	1	
	329 (5)	VMX2713	SPACER SHEET	1	
	330 (5)	VYK9069	SIDE CASE (L)(1) U.	1	
	331 (5)	VYC0618	GRIP BELT	1	
	332 (5)	VKF2930	AV JACK COVER	1	
	333 (5)	VXU1488	S/S ZOOM SW U.	1	
	334 (5)	VMZ2785	WIRE BARRIER	1	
	335 (5)	VMZ2782	BLINDER BARRIER	1	
	336 (5)	VYK8843	CASSETTE COVER (1) U.	1	NV-RX67EG/E
	336 (5)	VYK8844	CASSETTE COVER (1) U.	1	NV-RX64B
	337 (5)	VGU8068	CASSETTE LOCK BUTTON	1	
	338 (5)	VMB3300	CASSETTE COIL SPRING	1	
	339 (5)	VYK8837	SIDE CASE (R)(1) U.	1	
	340 (5)	VKM5130	TOP CASE	1	
	341 (5)	VGP4678	TOP OPERATION PANEL	1	
	342 (5)	VKF3020	CURSOR	1	
	343 (5)	VGU7722	EJECT KNOB	1	
	344 (5)	VGL0785	TOP PANEL LIGHT	1	
	345 (5)	VXU1519	VTR OP. U.	1	NV-RX64B
	345 (5)	VXU1520	VTR OP. U.	1	NV-RX67EG/E
	350 (5)	VEK8521	REAR CASE U.	1	
	352 (5)	VGQ5183	LCD PANEL HOLDER	1	
	353 (5)	VGQ5314	LCD PANEL BARRIER	1	
	354 (5)	VSL0517	LCD PANEL U.	1	
	355 (5)	VXU1523	CAMERA OP. U.	1	
	356 (5)	VMZ2929	H.A.BARRIER	1	
	357 (5)	VXP1945	MF RING U.	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	358 (5)	VGQ5185	SELECT KNOB GUIDE	1	
	359 (5)	VGQ5186	SELECT KNOB HOLDER	1	
	360 (5)	VGU8069	SELECT KNOB	1	
	B301 (5)	XQN2+CJ8FZ	SCREW	1	
	B302 (5)	XQN2+CF7FZ	SCREW	2	
	B303 (5)	XQN2+CJ6FZ	SCREW	13	
	B304 (5)	XQN2+CJ8FZ	SCREW	1	
	B306 (5)	VHD1054	SCREW	2	
	B307 (5)	VHD1140	SCREW	1	
	B308 (5)	XTB2+4J	SCREW	1	
	B309 (5)	VHD0713	SCREW	1	
	B310 (5)	XQN14+C3	SCREW	3	
	B312 (5)	XQN2+CF5	SCREW	2	
	B314 (5)	XQN16+BJ3	SCREW	2	
	B315 (5)	VHD1139	SCREW	2	
	B316 (5)	XQN2+CJ8	SCREW	3	
	B317 (5)	VHD0794	SCREW	2	
	B318 (5)	XQN2+BJ4	SCREW	8	
	B319 (5)	XQN2+B2	SCREW	1	
	B320 (5)	XQN2+BJ4	SCREW	7	

12.6. PACKING PARTS & ACCESSORIES SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	652 (6)	VPN5109	CUSHION (LOWER)	1	
	653 (6)	VPG9822	PACKING	1	NV-RX67EG
	653 (6)	VPG9823	PACKING	1	NV-RX64B
	653 (6)	VPG9936	PACKING	1	NV-RX67E
⚠	655 (6)	VJA0664	AC CORD	1	NV-RX67EG/E
⚠	655 (6)	VJA0940	AC CORD	1	NV-RX64B
	656 (6)	VJA1087	DC OUTPUT CABLE	1	
	657 (6)	VFA0152	21-PIN ADAPTOR	1	NV-RX67EG/E
	658 (6)	VFC2522	SHOULDER STRAP	1	
	659 (6)	VPN5108	ACCESSORIES BOX	1	NV-RX67EG/E
	659 (6)	VPN5178	ACCESSORIES BOX	1	NV-RX64B
⚠	660 (6)	VQT7857	OPERATING INSTRUCTIONS	1	NV-RX67EG/E
			(GERMAN FRENCH DUTCH		
			DANISH)		
⚠	660 (6)	VQT7859	OPERATING INSTRUCTIONS	1	NV-RX64B
			(ENGLISH)		
⚠	660 (6)	VQT7858	OPERATING INSTRUCTIONS	1	NV-RX67E
			(ITALIAN ENGLISH SPANISH		
			SWEDISH)		
	661 (6)	VFA0039	AV CORD	1	
	663 (6)	VGQ6813	REMOTE CONTROLLER HOLDER	1	
	664 (6)	VEQ1697	REMOTE CONTROLLER	1	
	665 (6)	VJF1262	BATTERY COVER	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
			****** JIG & TOOLS ******		
			------ ELECTRICAL -------		
			TATSUJIN KIT		
			(For individual part		
			numbers of Tatsujin Kit		
			Please refer to		
			Technical Information		
			Order No. VRD9609T08)		
		VFKW0F0033	ATTACHMENT CABLE	2	OR VFK0670
		VFKW0F0056	ATTACHMENT CABLE	2	(OR VFKW0F0055)
		VFKW0F0001	COMMON CABLE	2	
		VFKW0F0128	ATTACHMENT CABLE	1	OR VFK0978
		VFKW0F0127	ATTACHMENT CABLE	1	
		VFKW0F0001	COMMON CABLE	1	
		VFKW0F0118	ATTACHMENT CABLE	1	OR VFK0929
		VFKW0F0117	ATTACHMENT CABLE	1	
		VFKW0F0001	COMMON CABLE	1	
		VFKW0F0132	ATTACHMENT CABLE	1	OR VFK0980
		VFKW0F0131	ATTACHMENT CABLE	1	
		VFKW0F0001	COMMON CABLE	1	
		VFKW0F0111	ATTACHMENT CABLE	1	OR VFK013
		VFKW0F0112	ATTACHMENT CABLE	1	
		VFKW0F0001	COMMON CABLE	1	
		VFKW0F0140	ATTACHMENT CABLE	1	
		VFKW0F0139	ATTACHMENT CABLE	1	
		VFKW0F0001	COMMON CABLE	1	
		VFK0668	EXTENSION CABLE	1	
			------ MECHANICAL ------		
		VFK0743	H-POSITION ADJUSTMENT	1	
		VFK0824	ASTERISK TYPE WRENCH	1	
		VFM8180HUPF	VHS-C ALIGNMENT TAPE	1	
		VFK0329	POST ADJ. SCREW DRIVER	1	
		VFK0326	HEX WRENCH SET	1	
		VFK27	HEAD CLEANING STICK	1	
		VFK1024	MORLYTONE GREASE	1	

12.7. ELECTRICAL PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE: Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICROFARADS (uf), P=uuF.
4. The P.C. Board units marked width "■" show below the main assembled parts.
5. The marking (RTL) indicaters the retention time is limited for this item.
After the discontinuation of this assembly in production, it will no longer be available.

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	■	VEP23474C	CAMERA/MAIN C.B.A.	1	(RTL)
	■	VEP28259A	E.V.F. C.B.A.	1	(RTL)
	■	VEP22276A	CCD FLEX. CARD C.B.A.	1	(RTL)
	■	VEP00Z89A	SMALL LCD DRIVE C.B.A.	1	(RTL)
	■	VEK8615	MIC UNIT	1	
	■	VXP1945	MF RING UNIT	1	
	■	VEP23474C	CAMERA/MAIN C.B.A.	1	(RTL)
	C301	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C302	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C303	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
	C304	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C305	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C306	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U	1	
	C307	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
	C308	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C309	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
	C310	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C311	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
	C312	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
	C313	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
	C314	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C315	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C316	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C317	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
	C318	ECST1AY225Z	T.CAPACITOR CH 10V 2.2U	1	
	C321	ECEV0GA101	E.CAPACITOR CH 4V 100U	1	
	C322	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C323	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C324	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C327	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C328	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C329	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P	1	
	C330	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C331	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C332	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C333	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C335	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C336	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C337	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C338	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
	C339	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
	C340	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C341	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C342	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C343	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C346	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C347	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C348	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C350	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C358	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
	C359	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
	C360	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C361	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C362	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C364	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C365	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C366	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U	1	
	C367	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U	1	
	C368	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C369	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C371	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C372	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C374	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
	C375	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C377	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C382	ECEV1AA101U	E.CAPACITOR CH 10V 100U	1	
	C383	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C385	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C386	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C387	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C388	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C701	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
	C702	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
	C703	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C704	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C705	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C711	ECEV1AA101U	E.CAPACITOR CH 10V 100U	1	
	C713	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
	C715	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C716	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C718	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C719	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C721	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
	C724	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C727	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C1001	ECUM1A225KBM	C.CAPACITOR CH 10V 2.2U	1	
	C1003	ECUM1A225KBM	C.CAPACITOR CH 10V 2.2U	1	
	C1004	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C1005	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
	C1008	ECUM1A225KBM	C.CAPACITOR CH 10V 2.2U	1	
	C1009	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
	C1010	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
	C1012	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C1014	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C1017	ECUM1E105KBM	C.CAPACITOR CH 25V 1U	1	
	C1019	ECUM1E334KBM	C.CAPACITOR CH 25V 0.33U	1	
	C1020	ECUM1E334KBM	C.CAPACITOR CH 25V 0.33U	1	
	C1022	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C1024	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C1025	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C1026	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
	C1027	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C1028	ECEV1HAR47	E.CAPACITOR CH 50V 0.47U	1	
	C1030	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P	1	
	C1032	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C1033	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C1034	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C1035	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C1036	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
	C1037	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	1	
	C1041	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C1046	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C1051	ECUM1C334KBN	C.CAPACITOR CH 16V 0.33U	1	
	C1055	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
	C1057	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
	C1063	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C1064	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C1065	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C1066	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C1071	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
	C1080	ECUX1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
	C1081	ECUX1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
	C1602	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C1603	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
	C1708	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C2001	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C2009	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C2020	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C2033	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	1	
	C2043	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C2202	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C2203	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
	C2207	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
	C2208	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C2209	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C2210	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C2212	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C2213	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C2214	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C2216	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C2217	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C2219	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C2220	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
	C2221	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C2222	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C2223	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C2224	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C2225	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C2226	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C2227	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C2233	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C3001	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C3002	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C3003	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C3004	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3005	ECEV05A470	E.CAPACITOR CH 4V 47U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C3006	ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
	C3008	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3009	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C3010	ERJ3GEYJ4R7	M.RESISTOR CH 1/16W 4.7	1	
	C3012	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C3016	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
	C3017	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3018	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
	C3019	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3020	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3022	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3023	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C3024	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3026	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3027	ECEV1AAN100	E.CAPACITOR CH 10V 10U	1	
	C3028	ECEV0GA471	E.CAPACITOR CH 4V 470U	1	
	C3029	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
	C3030	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C3031	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C3033	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C3035	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C3050	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C4001	ECUX1H821JCV	C.CAPACITOR CH 50V 820P	1	
	C4002	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C4003	ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1	
	C4004	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C4005	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P	1	
	C4006	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C4007	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
	C4008	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C4009	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C4012	ECST0JX226Z	T.CAPACITOR CH 6.3V 22U	1	
	C4014	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
	C4015	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C4016	ECUM2A472JCM	C.CAPACITOR CH 100V 4700P	1	
	C4017	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C4019	ECUM1C474KBN	C.CAPACITOR CH 16V 0.47U	1	
	C4020	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C4021	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C4022	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C4023	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
	C4024	ECST1CY475Z	T.CAPACITOR CH 16V 4.7U	1	
	C4025	ECST0JY685Z	T.CAPACITOR CH 6.3V 6.8U	1	
	C4026	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C4027	ECST1AY225Z	T.CAPACITOR CH 10V 2.2U	1	
	C4028	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
	C4029	ECUX1H122KBV	C.CAPACITOR CH 50V 1200P	1	
	C4030	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
	C4031	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
	C4032	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
	C4034	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C4035	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C4036	ECST0JY335Z	T.CAPACITOR CH 6.3V 3.3U	1	
	C4037	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C4038	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C4045	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C4046	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C4801	ECUX1C823KBV	C.CAPACITOR CH 16V 0.082U	1	
	C4803	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U	1	
	C4804	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C4805	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U	1	
	C4806	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U	1	
	C4807	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C4809	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
	C4816	ECST1CY105Z	T.CAPACITOR CH 16V 1U	1	
	C4817	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U	1	
	C4818	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5001	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5002	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5003	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5004	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5005	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C5006	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C5007	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C5008	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C5009	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5010	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5011	ECUX1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
	C5012	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5013	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5014	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C5016	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C5017	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5018	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C5019	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C5020	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5021	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5022	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C5023	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5024	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5025	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5041	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C5501	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5503	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5504	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C5505	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C5506	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5507	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C5508	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5509	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C5510	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C5511	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C5512	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C5513	ECUX1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
	C5514	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C5515	ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
	C5516	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
	C5517	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C5518	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5519	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C5520	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	1	
	C5521	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5522	ECUX1H090CCV	C.CAPACITOR CH 50V 9P	1	
	C5523	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
	C5524	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C5525	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5526	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
	C5527	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C5530	ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
	C5531	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C5534	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6001	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C6002	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6003	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6004	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6005	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C6009	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6010	ECEV1AA101U	E.CAPACITOR CH 10V 100U	1	
	C6011	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C6012	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6014	ECEV1CA470P	E.CAPACITOR CH 16V 47U	1	
	C6015	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6016	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6017	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C6018	ECUX1H090CCV	C.CAPACITOR CH 50V 9P	1	
	C6019	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C6020	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6021	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6022	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
	C6023	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
	C6024	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C6025	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C6026	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6027	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C6028	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C6029	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C6030	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C6031	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C6032	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6033	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6034	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6038	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C6039	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6040	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
	C6041	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
	C6042	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C6044	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6045	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6046	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
	C6047	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6048	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
	C6049	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C6050	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
	C6051	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6053	ECEV0GA221	E.CAPACITOR CH 4V 220U	1	
	C6054	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C6056	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
	C6057	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
	C6058	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
	C6100	ECST0JY106Z	T.CAPACITOR CH 6.3V 10U	1	
	C6201	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
	C6202	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
	C6203	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
	C6205	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
	C6206	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
	C6207	ECEV05A470	E.CAPACITOR CH 4V 47U	1	
	C6208	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C6209	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	D301	MA111	DIODE	1	
	D304	1SS355	DIODE	1	
	D1006	MA111	DIODE	1	
	D1007	MA111	DIODE	1	
	D1009	MA8180-M	DIODE	1	
	D1015	EC10QS03L12	DIODE	1	
	D1020	1SS355	DIODE	1	
	D1601	MA8160-M	DIODE	1	
	D1602	MA8160-M	DIODE	1	
	D1603	MA8160-M	DIODE	1	
	D1604	MA8160-M	DIODE	1	
	D1706	MA111	DIODE	1	
	D3001	MA133	DIODE	1	
	D3002	MA132WK	DIODE	1	
	D3004	MA111	DIODE	1	
	D4001	MA8030	DIODE	1	
	D6001	MA111	DIODE	1	
	D6003	SB05-05CP	DIODE	1	
	D6004	MA8030	DIODE	1	
	D6005	MA728	DIODE	1	
	D6006	MA728	DIODE	1	
	D6007	MA111	DIODE	1	
	D6009	MA132WA	DIODE	1	
	D6010	MA132WA	DIODE	1	
	D6011	MA132WK	DIODE	1	
	D6012	MA132WA	DIODE	1	
	D6013	MA111	DIODE	1	
	D6014	MA132WA	DIODE	1	
	D6015	MA132WA	DIODE	1	
	D6016	MA133	DIODE	1	
	D6017	MA132WA	DIODE	1	
	D6018	MA728	DIODE	1	
	D6019	MA132WA	DIODE	1	
	D6020	MA728	DIODE	1	
	D6021	MA132WA	DIODE	1	
	D6022	MA132WA	DIODE	1	
	D6023	MA728	DIODE	1	
	D6025	MA132WA	DIODE	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	D6026	MA132WA	DIODE	1	
	D6027	MA132WA	DIODE	1	
	D6030	MA728	DIODE	1	
	D6201	MA111	DIODE	1	
	FP701	VJS3319B018	CONNECTOR (FEMALE) 18P	1	
	FP2001	VJS3911A007	CONNECTOR (FEMALE) 7P	1	
	FP2002	VJS2959B018	CONNECTOR (FEMALE) 18P	1	
	FP4001	VJS2958D009	CONNECTOR (FEMALE) 9P	1	
	FP4002	VJS3913B017P	CONNECTOR (FEMALE) 17P	1	
	FP5001	VJS2959B013	CONNECTOR (FEMALE) 13P	1	
	FP6001	VJS2959B018	CONNECTOR (FEMALE) 18P	1	
	FP6002	VJS2959B006	CONNECTOR (FEMALE) 6P	1	
	FP6003	VJS3930B021	CONNECTOR (FEMALE) 21P	1	
	FP6004	VJS3654B008	CONNECTOR (FEMALE) 8P	1	
	FP6005	VJS3931B006	CONNECTOR (FEMALE) 6P	1	
	FP6006	VJS3931B024	CONNECTOR (FEMALE) 24P	1	
	IC301	F712524CPBW	IC	1	
	IC302	M62366GP	IC	1	
	IC303	XC62FP3302MR	IC	1	
	IC304	BU2990-02	IC	1	
	IC308	Z4C2973	IC	1	
	IC309	ADS932E	IC	1	
	IC313	MN7E002B2S1	IC	1	
	IC314	M52948FP	IC	1	
	IC315	MN31121SA	IC	1	
	IC316	XC62FP3002MR	IC	1	
	IC701	TB6526AF	IC	1	
	IC702	TB6526AF	IC	1	
	IC706	NJM2115VA	IC	1	
	IC711	TA75W01FU	IC	1	
	IC1001	BA9706K	IC	1	
	IC2201	TB6538F	IC	1	
	IC2202	UN224	TRANSISTOR-RESISTOR	1	
	IC2203	UN224	TRANSISTOR-RESISTOR	1	
	IC3001	HA118603F	IC	1	
	IC5001	AN3355FHP	IC	1	
	IC5501	MSM7470-73MS	IC	1	
	IC6001	TA75W393FU	IC	1	
	IC6002	S3514AEFSTB	IC	1	
	IC6003	MN103004KCH	IC	1	
	IC6004	XC62FP3702MR	IC	1	
	IC6005	BA6289F	IC	1	
	IC6006	TA75W393FU	IC	1	
	IC6007	S80821ANNP	IC	1	
	IC6008	AK6480AF	IC	1	
	IC6009	S80825ANNP	IC	1	
	IC6010	XC62FP2602PR	IC	1	
	IC6011	XC62FP3002MR	IC	1	
	IC6201	BA8400FV	IC	1	
	IC6202	XC62FP3002MR	IC	1	
	L301	VLQ0319K100	COIL 10UH	1	
	L302	VLQ0426J220	COIL 22UH	1	
	L303	ELJFA390JB	COIL 39UH	1	
	L304	VLQ0426J1R5	COIL 1.5UH	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	L305	ELJPA470KB	COIL 47UH	1	
	L306	VLQ0426J220	COIL 22UH	1	
	L307	VLQ0426J100	COIL 10UH	1	
	L316	VLQ0426J5R6	COIL 5.6UH	1	
	L322	VLQ0426J330	COIL 33UH	1	
	L703	VLQ0319K100	COIL 10UH	1	
	L1001	VLQ0833M4R7	COIL 4.7UH	1	
	L1002	VLQ0827M220	COIL 22UH	1	
	L1003	VLQ0834M4R7	COIL 4.7UH	1	
	L1004	VLQ0319K100	COIL 10UH	1	
	L1006	VLQ0319K100	COIL 10UH	1	
	L1007	VLQ0827M470	COIL 47UH	1	
	L1008	VLQ0319M4R7	COIL 4.7UH	1	
	L1010	VLQ0319K100	COIL 10UH	1	
	L1011	VLQ0319K101	COIL 100UH	1	
	L1014	VLQ0319K100	COIL 10UH	1	
	L1015	ELJPA470KB	COIL 47UH	1	
	L1061	VLQ0827M330	COIL 33UH	1	
	L1062	VLQ0827M330	COIL 33UH	1	
	L3001	ELJPA470KB	COIL 47UH	1	
	L3002	VLQ0319K100	COIL 10UH	1	
	L3003	ELJFA820JB	COIL 82UH	1	
	L3004	VLQ0426J120	COIL 12UH	1	
	L4005	VLQ0319K101	COIL 100UH	1	
	L5001	ELJPA470KB	COIL 47UH	1	
	L5002	ELJPA470KB	COIL 47UH	1	
	L5003	ELJPA470KB	COIL 47UH	1	
	L5004	ELJPA470KB	COIL 47UH	1	
	L5501	ELJPA470KB	COIL 47UH	1	
	L5502	ELJFA100JB	COIL 10UH	1	
	L5503	ELJFC120ZB	CHIP INDUCTOR	1	
	L5504	ELJFA390JB	COIL 39UH	1	
	L5506	ELJPA470KB	COIL 47UH	1	
	L5507	ELJFA121JB	COIL 120UH	1	
	L6201	ELJPA470KB	COIL 47UH	1	
	LB302	VLP0175	COIL	1	
	LB303	VLP0175	COIL	1	
	LB304	VLP0175	COIL	1	
	LB306	VLP0175	COIL	1	
	LB309	VLP0153	COIL	1	
	LB310	VLP0153	COIL	1	
	LB312	VLP0175	COIL	1	
	LB1601	VLP0307	COIL	1	
	LB1602	VLP0307	COIL	1	
	LB4001	VLP0146	COIL	1	
	LB6001	VLP0153	COIL	1	
	LB6002	VLP0153	COIL	1	
	LB6003	VLP0153	COIL	1	
	LB6004	VLP0153	COIL	1	
	LB6005	VLP0175	COIL	1	
	LB6006	VLP0175	COIL	1	
	LB6007	VLP0175	COIL	1	
	P1001	VJP3172B004	CONNECTOR (MALE) 4P	1	
	PP301	VJP3358A012	CONNECTOR (MALE) 12P	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	PP3001	VJP3359D040	CONNECTOR (MALE) 40P	1	
	PS1003	VJS4005B006	CONNECTOR (FEMALE) 6P	1	
	PS3009	VJS4005B004	CONNECTOR (FEMALE) 4P	1	
	Q201	XP4601	TRANSISTOR-TRANSISTOR	1	
	Q301	XP4401	TRANSISTOR	1	
	Q302	2SB1462-R	TRANSISTOR	1	
	Q304	2SD2216	TRANSISTOR	1	
	Q701	IMT17T110	TRANSISTOR	1	
	Q702	IMT17T110	TRANSISTOR	1	
	Q703	IMT17T110	TRANSISTOR	1	
	Q704	2SD601A	TRANSISTOR	1	
	Q706	IMT17T110	TRANSISTOR	1	
	Q707	2SB798	TRANSISTOR	1	
	Q708	XP4501	TRANSISTOR-TRANSISTOR	1	
	Q780	2SD874	TRANSISTOR	1	
	Q781	2SB1462-R	TRANSISTOR	1	
	Q1001	2SB1073	TRANSISTOR	1	
	Q1003	MPL1	TRANSISTOR	1	
	Q1004	2SD2210	TRANSISTOR	1	
	Q1010	2SB1462-R	TRANSISTOR	1	
	Q1061	MPL1	TRANSISTOR	1	
	Q1062	MPL1	TRANSISTOR	1	
	Q3001	XP4501	TRANSISTOR-TRANSISTOR	1	
	Q3002	XP4401	TRANSISTOR	1	
	Q3003	2SD2216	TRANSISTOR	1	
	Q3004	2SD2216	TRANSISTOR	1	
	Q3005	2SC4627	TRANSISTOR	1	
	Q3006	XP4601	TRANSISTOR-TRANSISTOR	1	
	Q3007	XP4401	TRANSISTOR	1	
	Q3009	XP4601	TRANSISTOR-TRANSISTOR	1	
	Q3010	XP4501	TRANSISTOR-TRANSISTOR	1	
	Q4001	XP6401	TRANSISTOR	1	
	Q4002	2SD602-R	TRANSISTOR	1	
	Q4003	2SB1219	TRANSISTOR	1	
	Q4004	XP4501	TRANSISTOR-TRANSISTOR	1	
	Q4006	2SB1462-R	TRANSISTOR	1	
	Q4007	XP4501	TRANSISTOR-TRANSISTOR	1	
	Q4009	2SD2216	TRANSISTOR	1	
	Q4014	XP4601	TRANSISTOR-TRANSISTOR	1	
	Q4801	2SD2216	TRANSISTOR	1	
	Q4802	XP4501	TRANSISTOR-TRANSISTOR	1	
	Q4804	XP4501	TRANSISTOR-TRANSISTOR	1	
	Q4805	2SD2216	TRANSISTOR	1	
	Q5001	XN4504	TRANSISTOR-TRANSISTOR	1	
	Q5002	XN4504	TRANSISTOR-TRANSISTOR	1	
	Q5003	2SA812	TRANSISTOR	1	
	Q5501	2SD2216	TRANSISTOR	1	
	Q5502	2SB1462-R	TRANSISTOR	1	
	Q5503	2SB1462-R	TRANSISTOR	1	
	Q5504	2SD2216	TRANSISTOR	1	
	Q6001	2SD1030	TRANSISTOR	1	
	Q6002	2SB1462-R	TRANSISTOR	1	
	Q6003	2SD2216	TRANSISTOR	1	
	Q6004	2SD874	TRANSISTOR	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	Q6005	XP6501	TRANSISTOR	1	
	Q6006	XP1501	TRANSISTOR-TRANSISTOR	1	
	QR301	MRN2103	TRANSISTOR-RESISTOR	1	
	QR302	MRN2107	TRANSISTOR-RESISTOR	1	
	QR303	MRN1111	TRANSISTOR-RESISTOR	1	
	QR304	XP1213	TRANSISTOR-RESISTOR	1	
	QR305	MRN1104	TRANSISTOR-RESISTOR	1	
	QR701	MRN1102	TRANSISTOR-RESISTOR	1	
	QR781	UN2130X	TRANSISTOR-RESISTOR	1	
	QR782	MRN1103	TRANSISTOR-RESISTOR	1	
	QR1001	MRN2102	TRANSISTOR-RESISTOR	1	
	QR1005	UN9217	TRANSISTOR-RESISTOR	1	
	QR1061	MRN2111	TRANSISTOR-RESISTOR	1	
	QR1701	UN2130X	TRANSISTOR-RESISTOR	1	
	QR1702	MRN1107	TRANSISTOR-RESISTOR	1	
	QR2002	MRN1111	TRANSISTOR-RESISTOR	1	
	QR3003	MRN1103	TRANSISTOR-RESISTOR	1	
	QR3004	XP4312	TRANSISTOR-RESISTOR	1	
	QR3005	XP1212	TRANSISTOR-TRANSISTOR	1	
	QR3006	MRN1111	TRANSISTOR-RESISTOR	1	
	QR3007	MRN1111	TRANSISTOR-RESISTOR	1	
	QR4003	MRN2103	TRANSISTOR-RESISTOR	1	
	QR4004	XP1215	TRANSISTOR-TRANSISTOR	1	
	QR4005	MRN1104	TRANSISTOR-RESISTOR	1	
	QR4008	MRN1104	TRANSISTOR-RESISTOR	1	
	QR5502	MRN1103	TRANSISTOR-RESISTOR	1	
	QR6001	MRN2107	TRANSISTOR-RESISTOR	1	
	QR6002	MRN1102	TRANSISTOR-RESISTOR	1	
	QR6004	XP4115	TRANSISTOR-RESISTOR	1	
	QR6005	MRN2103	TRANSISTOR-RESISTOR	1	
	QR6007	MRN1102	TRANSISTOR-RESISTOR	1	
	QR6008	MRN1107	TRANSISTOR-RESISTOR	1	
	QR6009	UN9210	TRANSISTOR-RESISTOR	1	
	QR6010	XP1213	TRANSISTOR-RESISTOR	1	
	QR6012	UN9110	TRANSISTOR-RESISTOR	1	
	QR6013	MRN2111	TRANSISTOR-RESISTOR	1	
	QR6014	MRN1111	TRANSISTOR-RESISTOR	1	
	QR6050	XP1213	TRANSISTOR-RESISTOR	1	
	QR6801	MRN2111	TRANSISTOR-RESISTOR	1	
	R301	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
	R302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R303	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R304	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R305	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
	R307	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R308	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R309	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
	R310	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
	R311	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
	R312	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R313	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R314	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	R315	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
	R316	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R317	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
	R318	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
	R319	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R320	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R321	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
	R323	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R324	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
	R325	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	1	
	R326	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
	R327	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R328	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R329	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
	R330	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R331	ERJ3RBD132	M.RESISTOR CH 1/16W 1.3K	1	
	R332	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R333	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R334	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R335	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
	R336	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
	R337	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R338	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R339	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
	R340	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R341	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R342	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
	R343	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
	R344	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R345	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R346	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R347	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R358	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R359	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R360	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R361	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R363	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R364	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R365	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R370	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R373	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
	R376	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R377	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
	R379	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
	R380	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R381	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R382	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R386	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R388	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R394	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
	R396	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R400	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R401	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R701	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
	R702	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
	R703	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R704	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
	R705	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
	R706	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
	R707	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R708	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
	R709	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R711	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R712	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R713	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R716	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R717	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
	R718	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R722	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
	R723	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
	R726	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R727	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R728	ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
	R729	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
	R730	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R731	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
	R732	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R733	ERJ3GEYJ564	M.RESISTOR CH 1/16W 560K	1	
	R734	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
	R735	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
	R736	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	1	
	R737	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	1	
	R738	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
	R740	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
	R743	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	1	
	R745	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R761	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
	R780	ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
	R781	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R782	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
	R784	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R785	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R1001	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
	R1002	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
	R1005	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
	R1006	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
	R1007	ERJ8GEYJ330	M.RESISTOR CH 1/8W 33	1	
	R1008	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
	R1009	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
	R1012	ERJ6RHD1872	M.RESISTOR CH 1/10W 18.7K	1	
	R1013	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	1	
	R1014	ERJ6RBD182	M.RESISTOR CH 1/10W 1.8K	1	
	R1015	ERJ6RBD182	M.RESISTOR CH 1/10W 1.8K	1	
	R1016	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
	R1017	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R1018	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
	R1019	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R1020	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
	R1021	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
	R1022	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R1023	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
	R1024	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
	R1025	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R1035	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
	R1038	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
	R1039	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1	
	R1040	ERJ3RED560	M.RESISTOR CH 1/16W 56	1	
	R1052	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
	R1057	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
	R1063	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R1064	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
	R1065	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
	R1066	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
	R1067	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R1068	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
	R1069	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R1071	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R1072	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R1073	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R1085	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R1086	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
⚠	R1601	VSF0226D25T	FUSE	1	
	R1602	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
	R1603	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	1	
	R1699	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
	R1702	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
	R1724	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
	R1726	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R1727	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
	R1805	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R1806	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R1807	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R2001	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R2002	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R2010	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R2012	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	1	
	R2019	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R2020	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R2201	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
	R2202	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R2203	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
	R2205	ERJ8GEYJR33	M.RESISTOR CH 1/8W 0.33	1	
	R2206	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R2207	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R2209	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	R2210	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
	R2211	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
	R2212	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R2213	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R2216	ERJ8RQJR22	M.RESISTOR CH 1/8W 0.22	1	
	R3001	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
	R3002	ERJ3RBD242	M.RESISTOR CH 1/16W 2.4K	1	
	R3003	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R3004	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	

R3004	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R3005	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
	R3006	ERJ3RBD682	M.RESISTOR CH 1/16W 6.8K	1	
	R3007	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
	R3009	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
	R3010	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
	R3011	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
	R3012	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R3013	ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
	R3015	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R3016	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R3017	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
	R3019	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R3020	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
	R3021	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R3022	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R3023	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R3024	ERJ3RBD621	M.RESISTOR CH 1/16W 620	1	
	R3025	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
	R3026	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
	R3027	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R3028	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
	R3029	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
	R3030	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
	R3033	ERJ3RBD511	M.RESISTOR CH 1/16W 510	1	
	R3034	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R3037	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
	R3039	ERJ3RBD362	M.RESISTOR CH 1/16W 3.6K	1	
	R3040	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R3041	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R3042	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R3043	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R3045	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
	R3050	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R3057	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R3058	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
	R3059	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
	R3060	ERJ3RED620	M.RESISTOR CH 1/16W 62	1	
	R4001	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
	R4002	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
	R4004	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R4005	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
	R4006	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R4007	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R4008	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R4009	ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2K	1	
	R4010	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
	R4011	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R4012	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R4013	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
	R4014	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
	R4015	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R4016	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R4017	ERJ3GEYJ2R2	M.RESISTOR CH 1/16W 2.2	1	
	R4018	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R4019	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
	R4020	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R4021	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	1	
	R4022	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R4023	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
	R4024	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R4025	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
	R4026	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
	R4027	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
	R4028	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
	R4029	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
	R4030	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R4031	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
	R4032	ERJ3RBD151	M.RESISTOR CH 1/16W 150	1	
	R4033	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
	R4034	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R4035	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R4036	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R4037	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
	R4038	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
	R4040	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R4041	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R4042	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
	R4044	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R4050	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
	R4060	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
	R4801	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
	R4802	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R4803	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
	R4804	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R4805	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
	R4806	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
	R4807	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
	R4808	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
	R4809	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
	R4811	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R4812	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R4813	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R4814	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R4815	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
	R4817	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R4818	ERJ6GEYJ124	M.RESISTOR CH 1/10W 120K	1	
	R4819	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
	R4820	ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	
	R4821	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R4822	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R5001	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
	R5002	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
	R5003	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
	R5004	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R5005	ERJ3GEYG113	M.RESISTOR CH 1/16W 11K	1	
	R5007	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
	R5008	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7	1	
	R5500	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R5501	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
	R5502	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R5503	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
	R5504	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
	R5505	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R5506	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
	R5507	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R5508	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R5510	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R5513	ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2K	1	
	R5514	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R5515	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R5516	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R5517	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R5521	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R5522	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R5523	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R5524	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R5526	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R5527	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6001	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
	R6002	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R6003	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6004	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	R6005	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6006	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
	R6007	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R6008	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R6009	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6010	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
	R6011	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
	R6012	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6013	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
	R6014	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
	R6015	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6016	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6017	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
	R6018	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R6019	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6020	ERJ3GEYG333	M.RESISTOR CH 1/16W 33K	1	
	R6021	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	R6022	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	R6023	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	R6024	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6025	ERJ3GEYJ335	M.RESISTOR CH 1/16W 3.3M	1	
	R6026	ERJ3GEYG223	M.RESISTOR CH 1/16W 22K	1	
	R6027	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
	R6028	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R6029	ERJ3GEYJ304	M.RESISTOR CH 1/16W 30K	1	
	R6030	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6031	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R6032	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6033	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
	R6034	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R6035	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6036	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R6037	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R6038	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R6041	ERJ8GEYJ120	M.RESISTOR CH 1/8W 12	1	
	R6042	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R6043	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
	R6045	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
	R6046	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
	R6047	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6051	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
	R6052	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R6053	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6054	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6055	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R6057	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6058	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
	R6059	ERJ3RBD433	M.RESISTOR CH 1/16W 47K	1	
	R6060	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R6061	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
	R6062	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R6063	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R6064	ERJ3RBD363	M.RESISTOR CH 1/16W 36K	1	
	R6065	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R6066	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R6067	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
	R6068	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	R6069	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
	R6070	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
	R6071	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R6072	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
	R6073	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R6074	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6075	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6078	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6079	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6080	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R6082	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
	R6083	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6084	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6085	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R6086	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R6087	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R6088	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6089	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6090	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
	R6091	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
	R6092	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6093	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
	R6094	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6095	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
	R6097	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6098	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R6099	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	

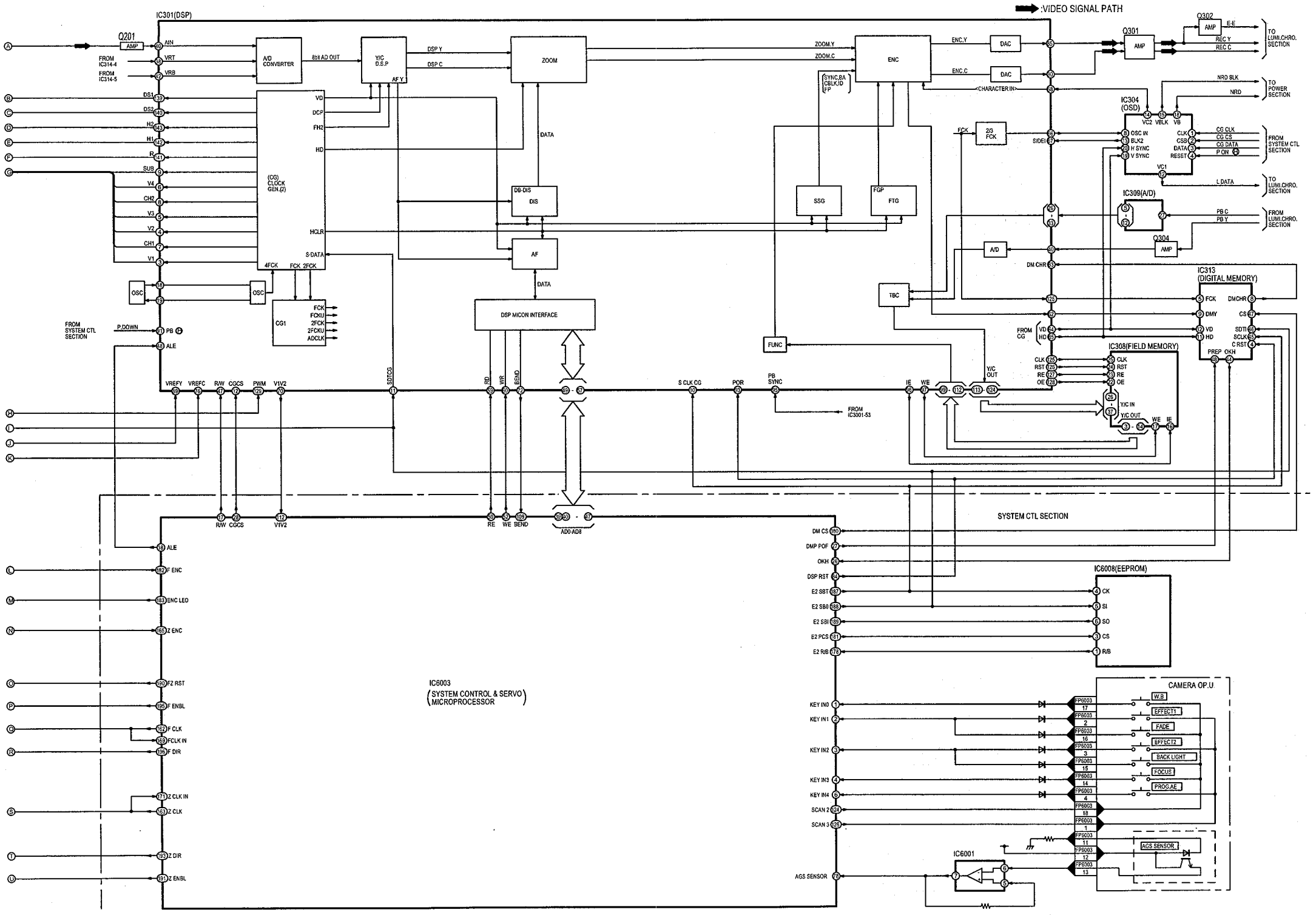
	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R6100	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
	R6101	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R6103	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R6104	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6105	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R6106	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
	R6107	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	1	
	R6108	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6109	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R6110	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R6111	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
	R6112	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R6113	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6114	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6115	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6116	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
	R6117	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R6118	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
	R6119	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R6120	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R6121	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6122	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
	R6123	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
	R6124	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
	R6125	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R6126	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
	R6127	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R6128	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R6129	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R6130	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R6131	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
	R6132	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6133	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R6203	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
	R6204	ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	
	R6205	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R6206	ERJ3GEYJ274	M.RESISTOR CH 1/16W 270K	1	
	R6207	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R6211	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	R6801	ERJ8GEYJ101	M.RESISTOR CH 1/8W 100	1	
	R6802	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
	RA301	EXBV4V104J	RESISTOR-RESISTOR	1	
	RA704	EXBV4V473J	RESISTOR-RESISTOR	1	
	RA6001	EXBV8V102J	RESISTOR-RESISTOR	1	
	RA6002	EXBV4V102J	RESISTOR-RESISTOR	1	
	RA6003	EXBV8V102J	RESISTOR-RESISTOR	1	
	RA6004	EXBV4V683J	RESISTOR-RESISTOR	1	
	RA6006	EXBV4V683J	RESISTOR-RESISTOR	1	
	RA6007	EXBV8V683J	RESISTOR-RESISTOR	1	
	RA6008	EXBV4V683J	RESISTOR-RESISTOR	1	
	RA6009	EXBV4V272J	RESISTOR-RESISTOR	1	
	RA6010	EXBV8V102J	RESISTOR-RESISTOR	1	
	RA6011	EXBV4V683J	RESISTOR-RESISTOR	1	
	RA6013	EXBV4V101J	RESISTOR-RESISTOR	1	

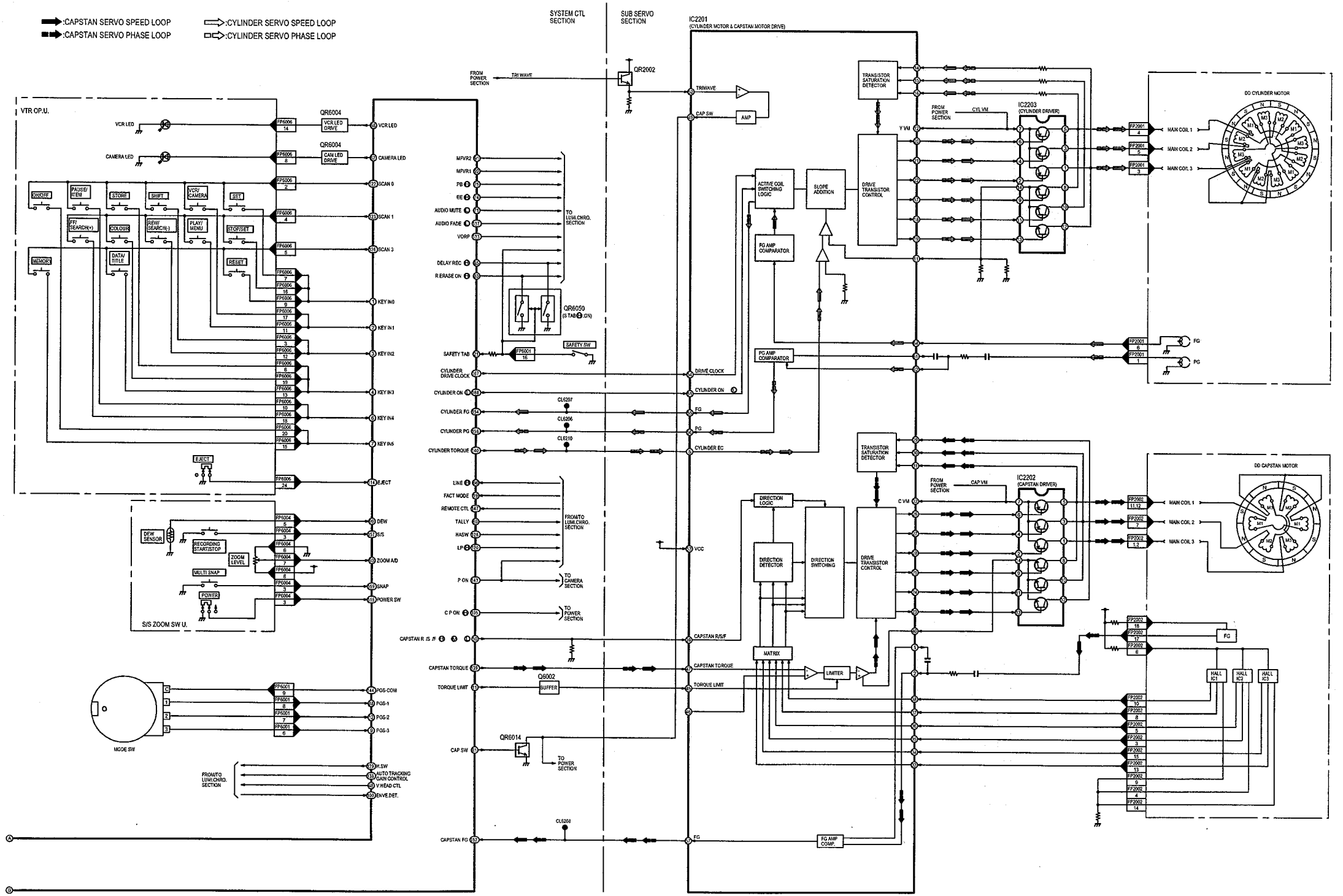
	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	RA6014	EXBV4V332J	RESISTOR-RESISTOR	1	
	T1001	ELL04T080R	TRANSFORMER	1	
	T4001	EQQ6QB009T	TRANSFORMER	1	
	X301	VSX1050	CRYSTAL OSCILLATOR	1	
	X6001	VSX0917	CRYSTAL OSCILLATOR	1	
	X6003	VSX0601	CRYSTAL OSCILLATOR	1	
	■	VEP28259A	E.V.F. C.B.A.	1	(RTL)
	C801	ECQV1H104JL	P.CAPACITOR 50V 0.1U	1	
	C802	ECA1CKF470	E.CAPACITOR 16V 47U	1	
	C803	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C804	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C805	ECEA0JKE221	E.CAPACITOR 6.3V 220U	1	
	C806	ECUM1H123KBN	C.CAPACITOR CH 50V 0.012U	1	
	C807	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
	C809	ECA1CKF470	E.CAPACITOR 16V 47U	1	
	C811	VCEA1ACC101	E.CAPACITOR 10V 100U	1	
	C812	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
	C813	ECUM2J221KBM	C.CAPACITOR CH 630V 220P	1	
	C814	VCEA1HCC010	E.CAPACITOR 50V 100U	1	
	C815	ECUM2H331KBM	C.CAPACITOR CH 500V 330P	1	
	C816	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
	C818	ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
	C831	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C832	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C833	ECUM2A472JUM	C.CAPACITOR CH 100V 4700P	1	
	D803	MA142WA	DIODE	1	
	D804	MA143A	DIODE	1	
	IC801	AN2516S	IC	1	
	L801	ELJPA220KB	COIL 22UH	1	
	L802	ELH5L3101	COIL	1	
	L804	VLQ0426J680	COIL 68UH	1	
	L806	VLQ0426J330	COIL 33UH	1	
	P801	VJP1597T	CONNECTOR (MALE) 4P	1	
	P802	VJP3318A004	CONNECTOR (MALE) 4P	1	
	P803	VJP1596T	CONNECTOR (MALE) 3P	1	
	P804	VJP1229A	CONNECTOR (MALE) 2P	1	
	Q802	2SD968A-S	TRANSISTOR	1	
	Q803	2SB1218A	TRANSISTOR	1	
	Q804	2SB1218A	TRANSISTOR	1	
	R801	ERJ6ENF4422	M.RESISTOR CH 1/10W 2.2K	1	
	R802	ERJ6GEYJ3R9	M.RESISTOR CH 1/10W 3.9	1	
	R804	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
	R806	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
	R807	ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
	R808	ERJ3RBD242	M.RESISTOR CH 1/16W 2.4K	1	
	R809	ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
	R810	ERJ6RBD104	M.RESISTOR CH 1/10W 100K	1	
	R811	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
	R815	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
	R816	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R817	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	

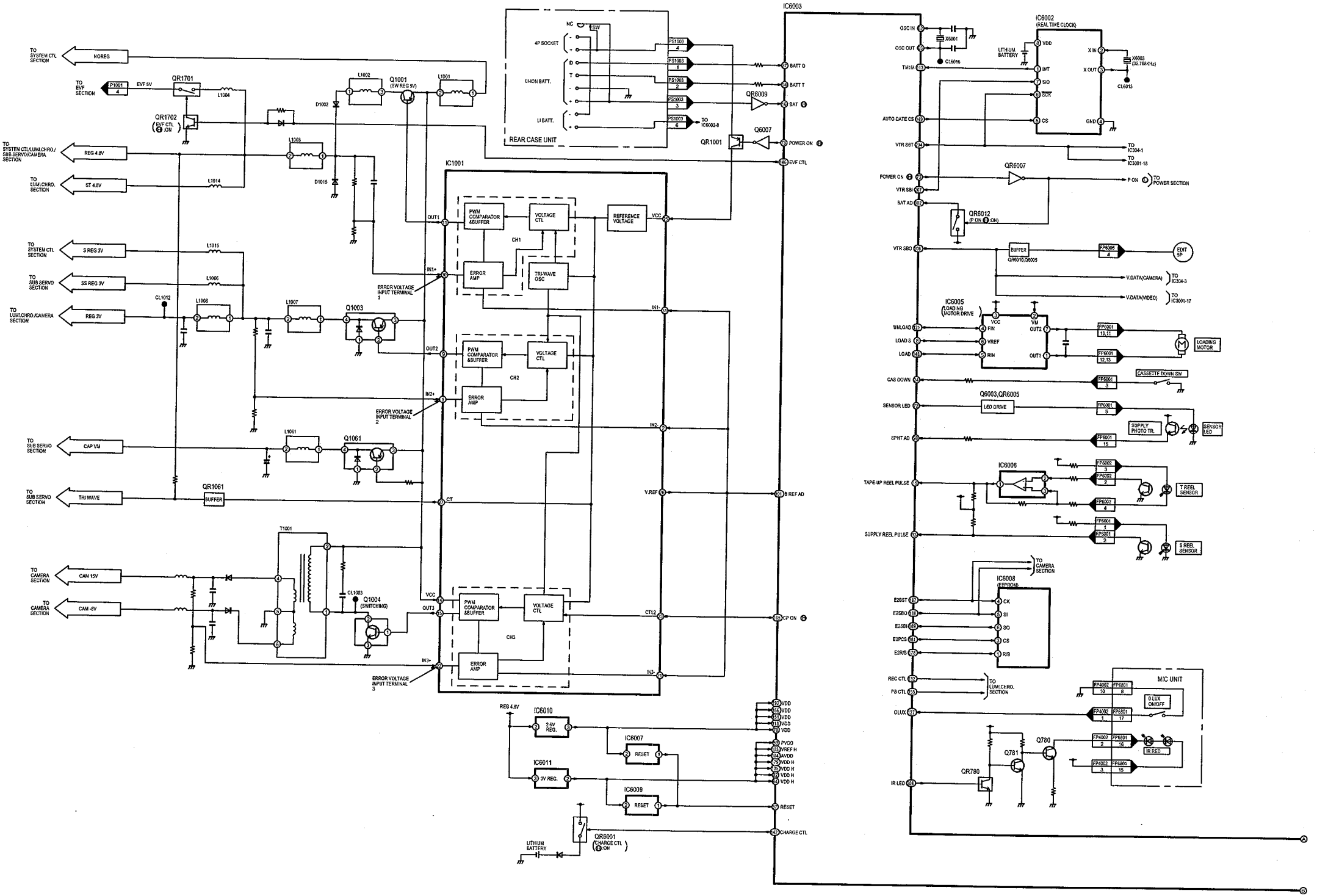
R817	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1

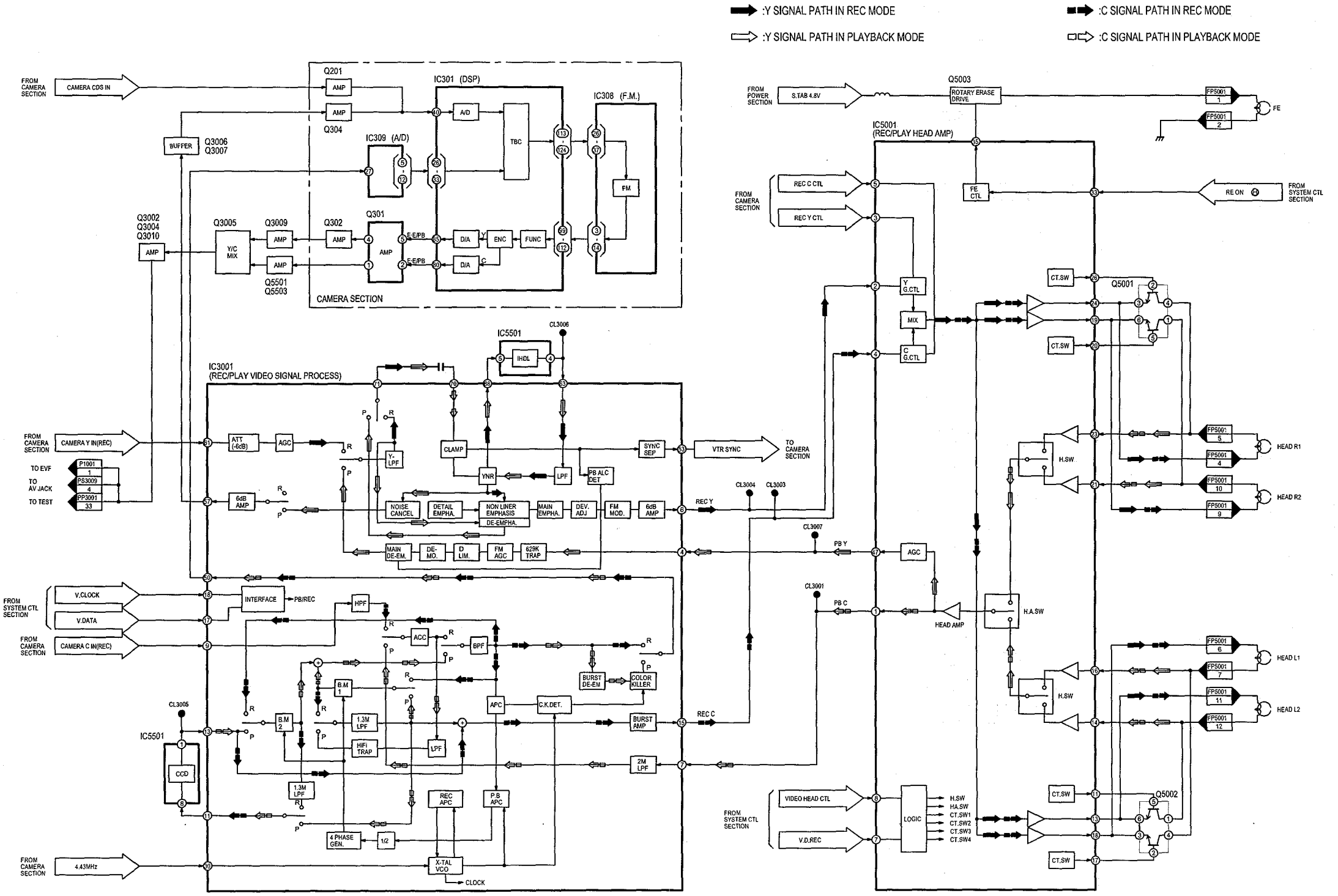
	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R818	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
	R819	ERJ8GEYJ275	M.RESISTOR CH 1/8W 2.7M	1	
	R820	ERJ8GEYJ335	M.RESISTOR CH 1/8W 3.3M	1	
	R821	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
	R823	ERJ6GEYJ8R2	M.RESISTOR CH 1/10W 8.2	1	
	R829	ERJ6ENF4222	M.RESISTOR CH 1/10W 2.2K	1	
	R833	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
	R834	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
	R835	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
	R836	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
	R840	ERJ8GEYJ106	M.RESISTOR CH 1/8W 10M	1	
	R841	ERJ8GEYJ825	M.RESISTOR CH 1/8W 8.2M	1	
	R842	ERJ8GEYJ106	M.RESISTOR CH 1/8W 10M	1	
	R843	ERJ8GEYJ825	M.RESISTOR CH 1/8W 8.2M	1	
	R844	ERJ3GEYJ270	M.RESISTOR CH 1/16W 27	1	
	R845	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
	R850	ERJ6RBD822	M.RESISTOR CH 1/10W 8.2K	1	
	R851	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
	R852	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
	R853	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
	S801	VEE0C17	CRT SOCKET	1	
	T801	ETF08L202A	FLYBACK TRANSFORMER	1	
	VR801	VRV0292B221	VARIABLE RESISTOR	1	
	VR803	EVMLSGA00BV6	TRIMMER POTENTIOMETERS	1	
	VR804	VRV0292B474	VARIABLE RESISTOR	1	
	■	VEP22276A	CCD FLEX. CARD C.B.A.	1	(RTL)
	C292	ECST1VX225Z	T.CAPACITOR CH 35V 2.2U	1	
	C295	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
	D291	MA153	DIODE	1	
	PS291	VJS3500C012	CONNECTOR (FEMALE) 12P	1	
	Q291	2SC2295	TRANSISTOR	1	
	R291	ERJ6GEYJ560	M.RESISTOR CH 1/10W 56	1	
	R292	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
	R293	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
			MISCELLANEOUS		
		VJB22276	FLEX. CARD	1	
	■	VEP00Z89A	SMALL LCD DRIVE C.B.A.	1	(RTL)
	C6601	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	FP6601	VJS3320B020	CONNECTOR (FEMALE) 20P	1	
	FP6602	VJS3913B006B	CONNECTOR (FEMALE) 6P	1	
	IC6601	BU9729K	IC	1	
	R6601	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	■	VEK8615	MIC UNIT	1	

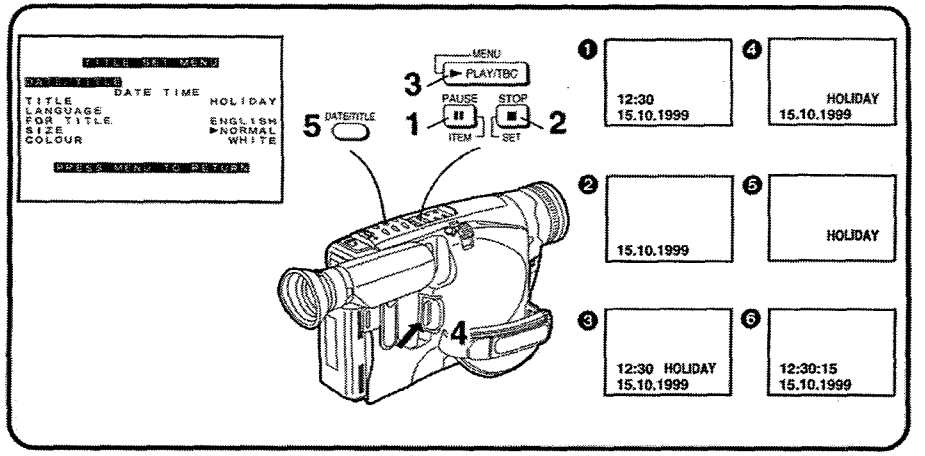
	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C6801	ECA0JM221	E.CAPACITOR 6.3V 220U	1	
	D6801	BR2202S-20B1	DIODE	1	
	D6802	PH310	DIODE	1	
	D6807	DN318U	LED (RED)	1	
	D6808	SIR568ST3FRS	LED (RED)	1	
	FL6801	VLF1445	FILTER	1	
	FP6801	VJS3913A017	CONNECTOR (FEMALE) 17P	1	
	IC6801	RPM6937-V4	IC	1	
	JK6801	VJJ0289	MIC JACK	1	
	L6801	VLQEL05S101K	COIL 100UH	1	
	LB6801	VLP0153	COIL	1	
	P6802	VJP3331B004	CONNECTOR (MALE) 4P	1	
	SW6801	VSP1083	0LUX SWITCH	1	
	W6801	VWJ0120	FLAT CARD CABLE	1	
	W6802	VWJ0120	FLAT CARD CABLE	1	
	W6803	VWJ0120	FLAT CARD CABLE	1	
			MISCELLANEOUS		
		VGQ5187	IR HOLDER	1	
		VWJ17XW050LL	FLAT CARD CABLE	1	
		VYQ1679	FILTER SELECT KNOB	1	
		XQN2+BJ4	SCREW	1	
		VGQ4709	BARRIER	1	
	■	VXP1945	MF RING UNIT	1	
	PC710	SG-211S	PHOTO INTERRUPTER	1	
	PC711	SG-211S	PHOTO INTERRUPTER	1	
			MISCELLANEOUS		
		VJS3172B004	CONNECTOR (FEMALE) 4P	1	
		XQN16+CJ5FZ	SCREW	1	


:VIDEO SIGNAL PATH
IC301(DSP)
Q201
AMP
AIN
VRT
VRB
FROM IC314-4
FROM IC314-5
A/D CONVERTER
8bit A.D OUT
Y/C D.S.P
AF Y
DSP Y
DSP C
ZOOM
ZOOM.Y
ZOOM.C
ENC
ENC.Y
ENC.C
DAC
CHARACTER IN
SYNC,BA CBLK,ID FP
Q301
AMP
Q302
AMP
E-E
REC Y
REC C
TO LUMI.CHRO. SECTION
NRD.BLK
NRD
TO POWER SECTION
IC304 (OSD)
VC2
VBLK
VB
OSC IN
BLK2
H SYNC
V SYNC
CLK
CSB
DATA
RESET
CG CLK
CG CS
CG DATA
P.ON
FROM SYSTEM CTL SECTION
VC1
L.DATA
TO LUMI.CHRO. SECTION
IC309(A/D)
PB C
PB Y
FROM LUMI.CHRO. SECTION
Q304
AMP
A/D
DM CHR
IC313 (DIGITAL MEMORY)
FCK
DMCHR
DMY
CS
VD
SDTI
HD
SCLK
C RST
PREP
OKH
IC308(FIELD MEMORY)
CLK
RST
RE
OE
Y/C IN
Y/C OUT
WE
IE
Y/C OUT
FROM CG
VD
HD
TBC
FUNC
SSG
FGP
FTG
2/3 FCK
FCK
SIDEI
DB-DIS
DIS
AF
DATA
HCLR
S-DATA
4FCK
FCK
2FCK
(CG) CLOCK GEN.(2)
VD
DCP
FH2
HD
DS1
DS2
H2
H1
R
SUB
V4
CH2
V3
V2
CH1
V1
OSC
OSC
CG1
FCK
FCKU
2FCK
2FCKU
ADCLK
DSP MICON INTERFACE
FROM SYSTEM CTL SECTION
P.DOWN
PB
ALE
VREFY
VREFC
R/W
CGCS
PWM
V1V2
SDTCG
RD
WR
BEND
S CLK CG
POR
PB SYNC
FROM IC3001-53
IE
WE
AD0-AD8
SYSTEM CTL SECTION
DM CS
DMP POF
OKH
DSP RST
E2 SBT
E2 SBO
E2 SBI
E2 PCS
E2 R/B
IC6008(EEPROM)
CK
SI
SO
CS
R/B
IC6003
(SYSTEM CONTROL & SERVO MICROPROCESSOR)
ALE
F ENC
ENC LED
Z ENC
FZ RST
F ENBL
F CLK
FCLK IN
F DIR
Z CLK IN
Z CLK
Z DIR
Z ENBL
KEY IN0
KEY IN1
KEY IN2
KEY IN3
KEY IN4
SCAN 2
SCAN 3
AGS SENSOR
CAMERA OP.U
W.B
EFFECT1
FADE
EFFECT2
BACK LIGHT
FOCUS
PROG.AE
AGS SENSOR
IC6001
FPC6003


:CAPSTAN SERVO SPEED LOOP
:CAPSTAN SERVO PHASE LOOP
:CYLINDER SERVO SPEED LOOP
:CYLINDER SERVO PHASE LOOP
SYSTEM CTL SECTION
SUB SERVO SECTION
IC2201
(CYLINDER MOTOR & CAPSTAN MOTOR DRIVE)
VTR OP.U.
QR6004
QR6004
QR2002
FROM POWER SECTION
TRI WAVE
TRIWAVE
CAP SW
AMP
TRANSISTOR SATURATION DETECTOR
IC2203
(CYLINDER DRIVER)
DD CYLINDER MOTOR
MAIN COIL 1
MAIN COIL 2
MAIN COIL 3
ACTIVE COIL SWITCHING LOGIC
SLOPE ADDITION
DRIVE TRANSISTOR CONTROL
FG AMP COMPARATOR
QR6050
SAFETY SW
DRIVE CLOCK
CYLINDER ON
FG
PG
CYLINDER EC
IC2202
(CAPSTAN DRIVER)
DD CAPSTAN MOTOR
DIRECTION LOGIC
DIRECTION DETECTOR
DIRECTION SWITCHING
MATRIX
LIMITER
CAPSTAN R/S/F
CAPSTAN TORQUE
TORQUE LIMIT
Q6002
QR6014
FG AMP COMP.
HALL IC1
HALL IC2
HALL IC3
MODE SW
S/S ZOOM SW U.
TO LUM.CHRO. SECTION
FROM/TO LUM.CHRO. SECTION
TO CAMERA SECTION
TO POWER SECTION


IC6003
IC1001
IC6002
(REAL TIME CLOCK)
REAR CASE UNIT
NOREG
REG 4.8V
ST 4.8V
S REG 3V
SS REG 3V
REG 3V
CAP VM
TRI WAVE
CAM 15V
CAM -8V
EVF 5V
QR1701
QR1702
Q1001
(SW REG 5V)
Q1003
Q1061
Q1004
(SWITCHING)
T1001
QR1061
BUFFER
PWM COMPARATOR &BUFFER
VOLTAGE CTL
REFERENCE VOLTAGE
ERROR AMP
TRI-WAVE OSC
CH1
CH2
CH3
ERROR VOLTAGE INPUT TERMINAL 1
ERROR VOLTAGE INPUT TERMINAL 2
ERROR VOLTAGE INPUT TERMINAL 3
4P SOCKET
LI-ION BATT.
LI BATT.
QR6009
Q6007
QR1001
IC6010
2.6V REG.
IC6011
3V REG.
IC6007
RESET
IC6009
RESET
QR6001
(CHARGE CTL ON)
LITHIUM BATTERY
X6001
CL6016
X6003
(32.768KHz)
CL6013
LITHIUM BATTERY
QR6007
QR6012
(P ON ON)
BUFFER
QR6010,Q6005
IC6005
(LOADING MOTOR DRIVE)
LOADING MOTOR
CASSETTE DOWN SW
Q6003,QR6005
LED DRIVE
SUPPLY PHOTO TR.
SENSOR LED
IC6006
T REEL SENSOR
S REEL SENSOR
IC6008
(EEPROM)
M/C UNIT
0 LUX ON/OFF
IR RED
Q780
Q781
QR780
TO SYSTEM CTL SECTION
TO EVF SECTION
TO SYSTEM CTL/LUM.CHRO./ SUB SERVO/CAMERA SECTION
TO LUM.CHRO. SECTION
TO SUB SERVO SECTION
TO LUM.CHRO./CAMERA SECTION
TO CAMERA SECTION
TO POWER SECTION
TO IC304-1
TO IC3001-18
TO IC304-3
TO IC3001-17
TO LUM/CHRO. SECTION
TO CAMERA SECTION


:Y SIGNAL PATH IN REC MODE
:Y SIGNAL PATH IN PLAYBACK MODE
:C SIGNAL PATH IN REC MODE
:C SIGNAL PATH IN PLAYBACK MODE
CAMERA SECTION
IC301 (DSP)
IC309 (A/D)
IC308 (F.M.)
IC5001 (REC/PLAY HEAD AMP)
IC3001 (REC/PLAY VIDEO SIGNAL PROCESS)
IC5501
Q5001
Q5002
Q5003
FROM CAMERA SECTION
CAMERA CDS IN
CAMERA Y IN(REC)
CAMERA C IN(REC)
TO EVF
TO AV JACK
TO TEST
FROM POWER SECTION
S.TAB 4.8V
ROTARY ERASE DRIVE
FE
RE ON
FROM SYSTEM CTL SECTION
TO CAMERA SECTION
VTR SYNC
REC C CTL
REC Y CTL
FE CTL
Y G.CTL
C G.CTL
MIX
CT.SW
H.SW
H.A.SW
HEAD R1
HEAD R2
HEAD L1
HEAD L2
HEAD AMP
REC Y
REC C
PB Y
PB C
V.CLOCK
V.DATA
4.43MHz
VIDEO HEAD CTL
V.D.REC
LOGIC
H.SW
HA.SW
CT.SW1
CT.SW2
CT.SW3
CT.SW4
BUFFER
Q3006
Q3007
Q3002
Q3004
Q3010
Q3005
Q3009
Q302
Q304
Q301
Q5501
Q5503
Y/C MIX
AMP
A/D
TBC
FM
D/A
ENC
FUNC
E-E/PB
ATT (-6dB)
AGC
Y-LPF
CLAMP
YNR
LPF
PB ALC DET
SYNC SEP
6dB AMP
NOISE CANCEL
DETAIL EMPHA.
NON LINER EMPHASIS
DE-EMPHA.
MAIN EMPHA.
DEV. ADJ
FM MOD.
MAIN DE-EM.
DE-MO.
D LIM.
FM AGC
629K TRAP
INTERFACE
PB/REC
HPF
ACC
BPF
BURST DE-EM
COLOR KILLER
APC
C.K.DET.
BURST AMP
2M LPF
6.M 1
B.M 2
1.3M LPF
HIFI TRAP
LPF
REC APC
P.B APC
4 PHASE GEN.
1/2
X-TAL VCO
CLOCK
CCD
IHDL
CL3001
CL3003
CL3004
CL3005
CL3006
CL3007
P1001
PS3009
PP3001
FP5001



Recording with the Time and/or Date Superimposed in the Picture

After displaying the [TITLE SET MENU] Menu...

1 Press the [ITEM] Button repeatedly to select [DATE/TITLE].

2 Press the [SET] Button repeatedly until the desired indication appears on the Title Menu.

- The indications change in the order ❶ to ❻.
  ❶ Date and Time ⟶ ❷ Date ⟶ ❸ Date, Time and Title ⟶ ❹ Date and Title ⟶ ❺ Title ⟶ ❻ Date and Time with seconds ⟶
- After turning the Movie Camera off and then on again, the previously selected Date/Time/Title Indication is no longer displayed. To make it appear again, press the [DATE/TITLE] Button once.

3 Press the [MENU] Button twice to exit the Menu.

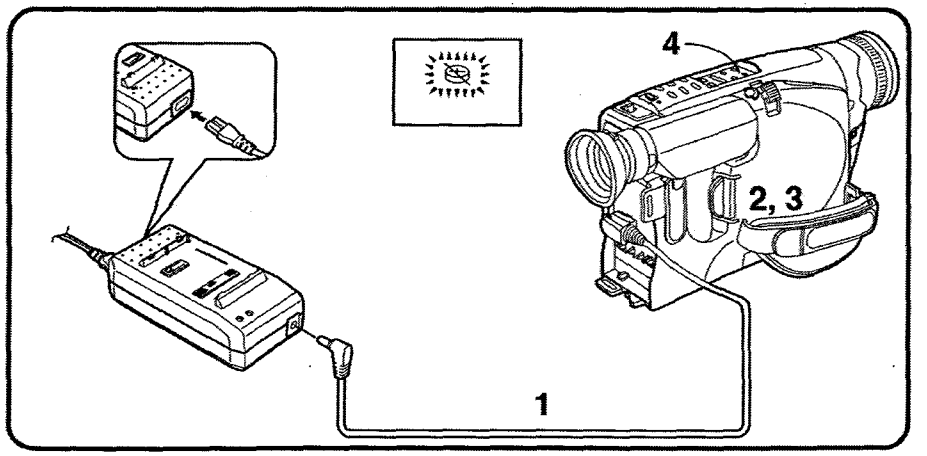
- The selected Date/Time/Title Indication appears.

4 Press the Recording Start/Stop Button to start recording.

■ **Deleting the Date/Time/Title Indication**

5 During recording or when the Movie Camera is in the Recording Pause Mode, press the [DATE/TITLE] Button to make the Date/Time/Title Indication disappear.

Be sure to turn the Movie Camera off before removing the Battery or disconnecting the AC Adaptor. Disconnecting the power supply while the Movie Camera is on erases the Date/Time/Title Indication stored in memory.



Charging the Built-in Lithium Battery

The internal clock works even when the Movie Camera is turned off, and it consumes power from the built-in lithium battery. When the Movie Camera is in operation, it automatically charges this battery. However, if the Movie Camera is not used for a very long time, the lithium battery can become discharged. This has occurred if the [⧖] Indication flashes when you turn on the Movie Camera. In this case, perform the following operations.

■ **Charging the Built-in Lithium Battery and Other Required Operations**

1 Connect the AC Adaptor to an AC mains socket and to the Movie Camera.

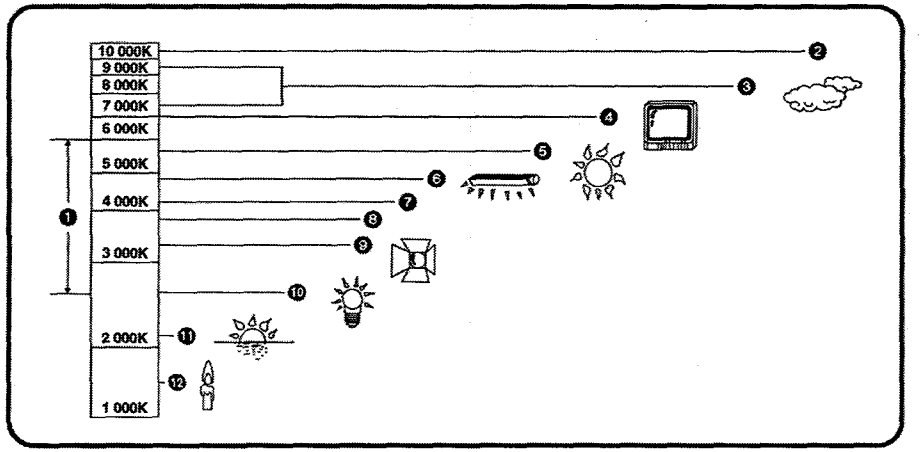
2 Leave the Movie Camera turned off.

- Although charging the lithium battery is possible with the Movie Camera turned on or off, we recommend to keep it turned off to conserve energy.

3 Leave the Movie Camera in this condition for approximately 4 hours.

- Charging the lithium battery in this way for 4 hours maintains the clock operation for approximately 6 months, charging for 26 hours (full charge) maintains it for approximately 2 years.

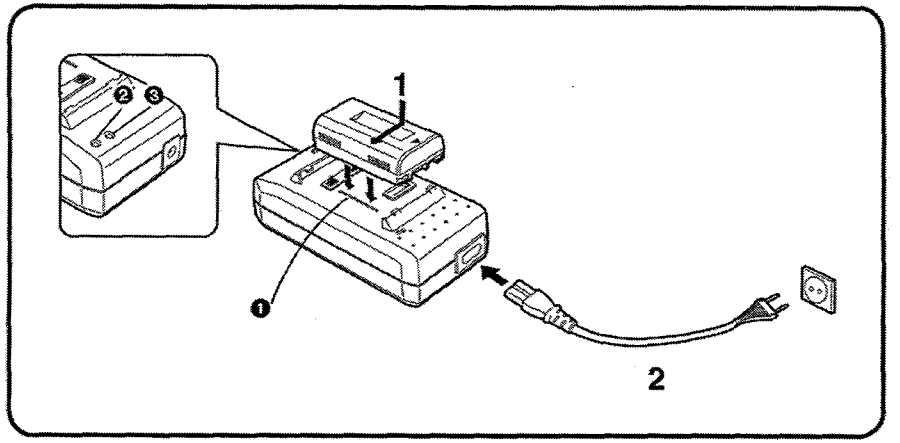
4 Set the clock to the current date and time.



Colour Temperature and White Balance Adjustment

Every light source has its own colour temperature which is measured in Kelvin (K). The higher the Kelvin value, the more bluish the light; the lower the value, the more reddish the light. The Kelvin value is related to the tint of the light, but not directly to its brightness.
The range ❶ indicated in the illustration above shows the light sources for which this Movie Camera can provide precise white balance adjustment and, therefore, natural colours in the recorded pictures, when using the Full Auto Mode. For light sources outside this range, adjust the white balance manually. Also, additional lighting may be necessary.

❶ Control range of this Movie Camera's Auto White Balance Adjustment Mode
❷ Blue sky
❸ Cloudy sky (Rain)
❹ TV screen
❺ Sunlight
❻ White fluorescent lamp
❼ 2 hours after sunrise or before sunset
❽ 1 hour after sunrise or before sunset
❾ Halogen light bulb
❿ Incandescent light bulb
⓫ Sunrise or sunset
⓬ Candlelight



Charging the Battery

Charge the Battery before using it.

1 Attach the Battery.

- Align the Battery with line ❶ and push it in the direction of the arrow while holding it down.

2 Securely connect the AC Mains Cable to the AC Adaptor and an AC Mains Socket.

- The [POWER] Lamp ❷ lights and then the [CHARGE] Lamp ❸ flashes and charging starts.
- If the [CHARGE] Lamp ❸ does not flash even though the Battery is attached, remove the Battery and then re-attach it.

■ Charging Lamp [CHARGE]

Flashing:	During charging
Lit:	The Battery can already be used to operate the Movie Camera but it is not yet fully charged. (Approx. 30-minute battery charge)
Off:	The Battery is fully charged.

■ Removing the Battery

Slide it in the opposite direction of that indicated in step 1 above.

- Charge the Battery at a room temperature between 10°C and 30°C.
- When charging, do not connect the DC Input Cable to the AC Adaptor.
- During recording and charging, the Battery becomes warm. However, this is normal.
- If you charge the Battery when it is not yet discharged, the [CHARGE] Lamp ❸ may flash briefly and then go out. This indicates that the Battery is fully charged. Therefore, this is not an indication of a malfunction.

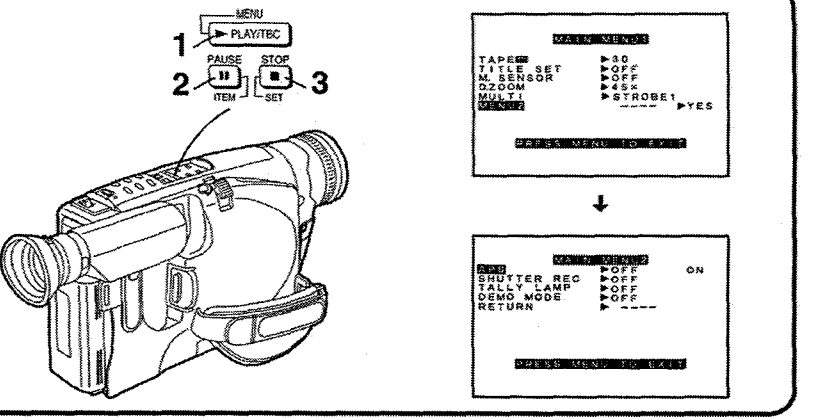
■ Charging Time and Maximum Continuous Recording Time in the Manual Recording Mode

Battery Model No.	Charging Time for a Full Charge	Max. Continuous Recording Time
CGR-V610 (supplied)	80 min.	105 min.
CGR-V620	145 min.	225 min.
CGR-V816	310 min.	440 min.

Battery Model No.	Approx. 30-Minute Charge	Max. Continuous Recording Time
CGR-V610 (supplied)	30 min.	45 min.
CGR-V620		
CGR-V816		

(The times shown in the above charts are approximations.)

Maximum Continuous Recording Time means the duration of continuous recording performed at an ambient temperature of 25°C and 60% relative humidity. In actual recording, however, the use of the zoom and other functions increases the power consumption, and higher or lower temperature reduces the Battery's ability to generate electricity. Therefore, the actual recording time per Battery may be approximately 30%–50% shorter than listed above.



Using the Menus

This Movie Camera displays the settings of various functions in Menus to make it easy to select the desired functions and settings.
Perform the following operations with the Movie Camera in the Camera Mode (the [CAMERA] Lamp lights) and in the Recording Pause Mode.

Using the Main Menus

1 Press the [MENU] Button.

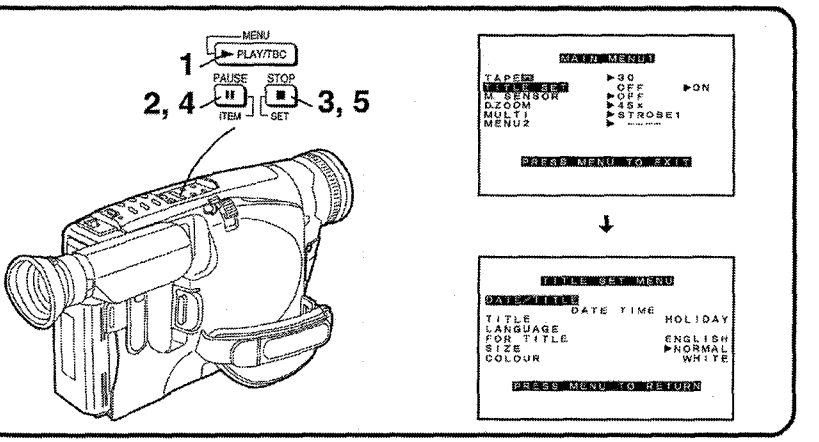
- The [MAIN MENU1] Menu appears.

2 Press the [ITEM] Button repeatedly to select the item to be set.

- If you select [MENU2], the [MAIN MENU2] Menu appears.

3 Press the [SET] Button repeatedly to set the desired mode for the selected item.

Exiting the Main Menu(s)
Press the [MENU] Button.



Using the Title Menu

1 Press the [MENU] Button.

- The [MAIN MENU1] Menu appears.

2 Press the [ITEM] Button repeatedly to select [TITLE SET].

3 Press the [SET] Button to set to [ON].

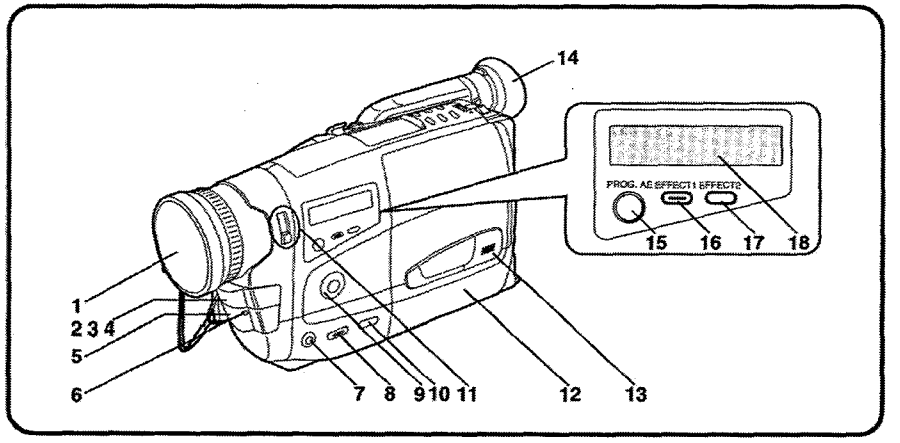
- The [TITLE SET MENU] Menu appears.

4 Press the [ITEM] Button repeatedly to select the item to be set.

5 Press the [SET] Button repeatedly to set the selected item to the desired mode.

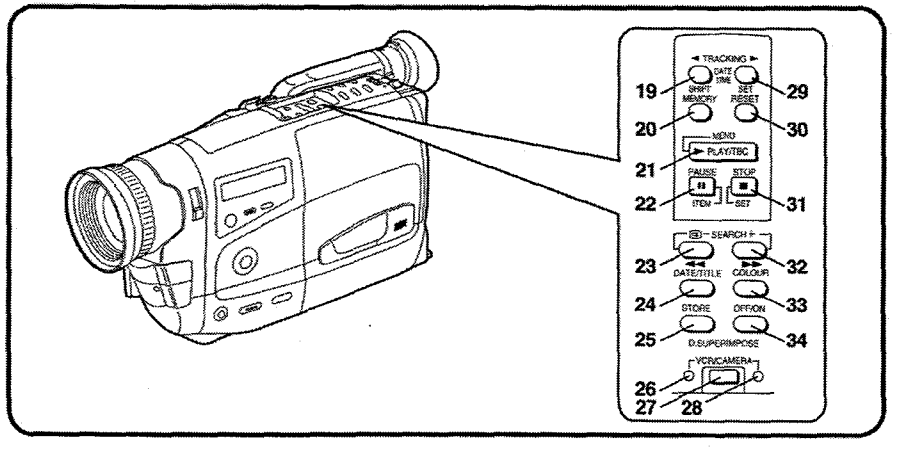
Exiting the Title Menu
Press the [MENU] Button once to return to the [MAIN MENU1] Menu, and then press the [MENU] Button once more to exit the Menu.

- The settings that you have selected on the Menus are maintained when you turn the Movie Camera off. However, if you disconnect the power supply unit (Battery or AC Adaptor) from the Movie Camera before turning it off, the selected settings may not be maintained.
- If you connect the Movie Camera to a TV, the Menu can be displayed on the TV screen.

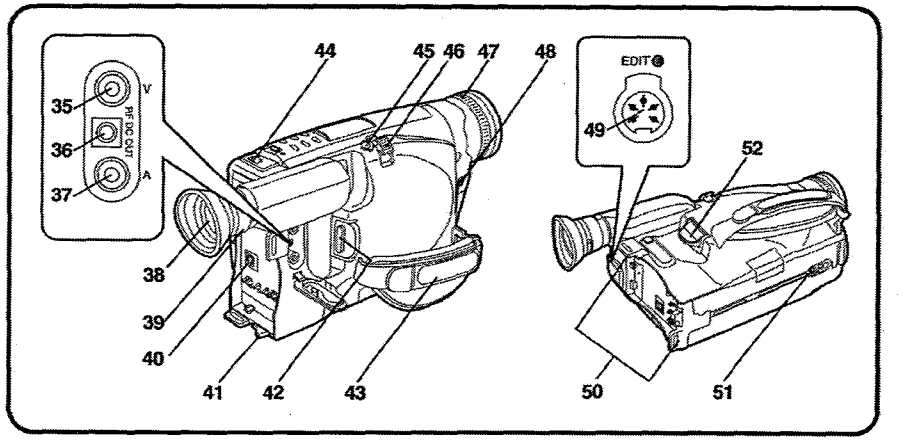


Controls and Components

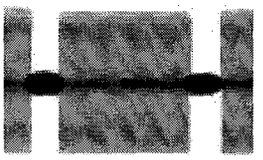
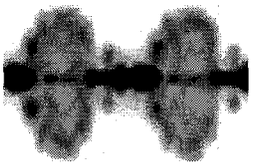
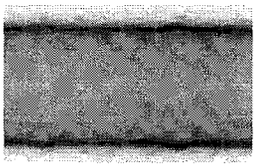
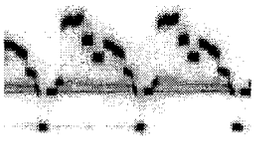
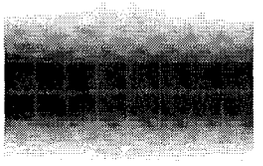
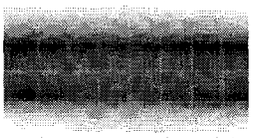
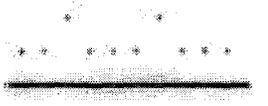
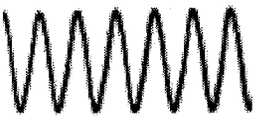
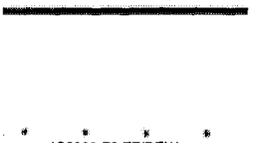
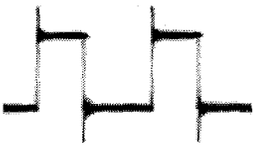
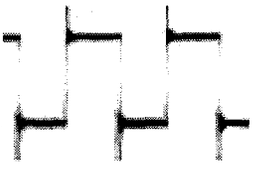
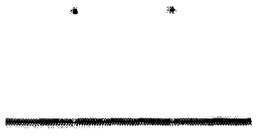
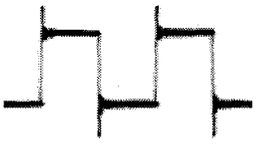
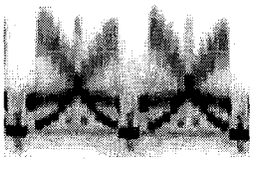
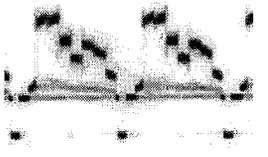
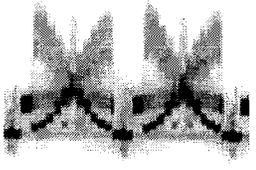
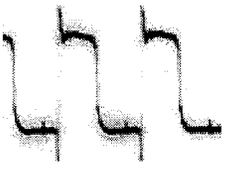
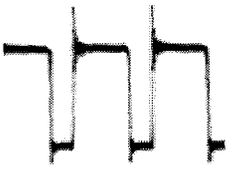
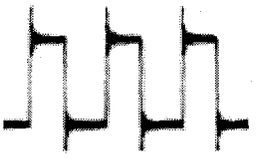
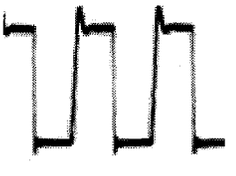
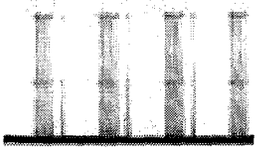
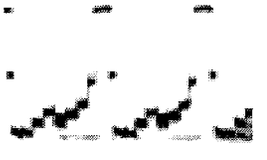
1 Lens Cap
2 White Balance Sensor
3 Remote Control Sensor
4 Built-in Infra-red Beam Emitters
5 Microphone
6 Tally Lamp
7 Focus Button [FOCUS]
8 Fade Button [FADE]
9 Backlight Button [BACKLIGHT]
10 White Balance Button [W.B]
11 0-Lux Recording Switch [0 LUX ON/OFF]
12 Cassette Compartment
13 Cassette Compartment Lock Button [LOCK]
14 Eyecup
15 Auto Exposure Selector Button [PROG. AE]
16 Digital Effect 1 Button [EFFECT1]
17 Digital Effect 2 Button [EFFECT2]
18 Multi Info Window



19 Date/Time Shift Button [DATE/TIME/SHIFT]
Tracking Button [◄ TRACKING]
20 Memory Button [MEMORY]
21 Playback Button [PLAY]
Menu Button [MENU]
Time Base Corrector Button [TBC]
22 Pause Button [PAUSE]
Item Selector Button [ITEM]
23 Reverse Search Button [–SEARCH]
Rewind/Review Button [◄◄]
Recording Check Button [⊜]
24 Date/Time/Title Button [DATE/TITLE]
25 Digital Image Store Button [STORE]
26 VCR (Playback) Mode Lamp [VCR]
27 VCR/Camera Mode Selector Button [VCR/CAMERA]
28 Camera (Recording) Mode Lamp [CAMERA]
29 Date/Time Set Button [DATE/TIME/SET]
Tracking Button [TRACKING ►]
30 Tape Counter Reset Button [RESET]
31 Stop Button [STOP]
Item Set Button [SET]
32 Forward Search Button [SEARCH+]
Fast Forward/Cue Button [►►]
33 Colour Selector Button for Digital Image [COLOUR]
34 Digital Image Superimpose Button [OFF/ON]



35 Video Output Socket [V]
36 Radio Frequency DC Output Socket [RF DC OUT]
37 Audio Output Socket [A]
38 Finder
39 Eyepiece Corrector Ring
40 DC Input Socket [DC IN]
41 Battery Eject Lever [◄ BATTERY EJECT]
42 Recording Start/Stop Button
43 Grip Belt
44 Cassette Eject Lever [⏏ EJECT]
45 Snapshot Recording Button [SNAP]
Multi Image/Picture-in-Picture Button [MULTI]
46 Zoom Lever [W • T]
47 Focus Ring
48 Microphone Socket [MIC]
49 Edit Socket [EDIT ⊜]
50 Shoulder Strap Holders
51 Tripod Receptacle
52 Power Switch [POWER]

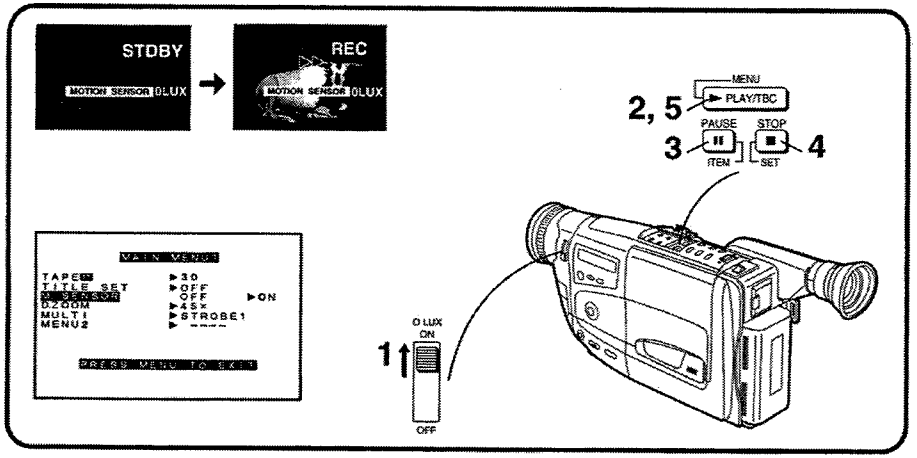
 IC701-11, 14 POWER ON 6.0 Vp-p (5msec./div.) ZOOM MOTOR DRIVING	 IC3001-15 REC 0.2 Vp-p (2msec./div.) COLOUR BAR	 IC3001-9 REC 0.5 Vp-p (20µsec./div.) COLOUR BAR	 IC3001-6 REC 0.4 Vp-p (5msec./div.) COLOUR BAR	 IC3001-61 REC 1.4 Vp-p (20µsec./div.) COLOUR BAR
 IC3001-57 REC 2.0 Vp-p (20µsec./div.) COLOUR BAR	 IC5001-1 PLAY 0.4 Vp-p (2msec./div.) COLOUR BAR	 IC5001-47 PLAY 0.2 Vp-p (2msec./div.) COLOUR BAR	 IC5001-8 3.0 Vp-p (20msec./div.) COLOUR BAR	 IC6003-13 FF/REW 2.2 Vp-p (50msec./div.)
 IC6003-15 FF/REW 3.0 Vp-p (20msec./div.)	 IC6003-63 STOP 2.6 Vp-p (50nsec./div.)	 IC6003-72 FF/REW 3.0 Vp-p (10msec./div.)	 IC6003-139, IC2201-47 REC/PLAY 5.2 Vp-p (1µsec./div.)	 IC6003-140 REC/PLAY 5.4 Vp-p (1µsec./div.)
 IC6003-150, IC2201-56 REC/PLAY 3.0 Vp-p (10msec./div.)	 IC6003-152, IC2201-57 REC/PLAY 3.0 Vp-p (0.2msec./div.)	 IC6003-154, IC2201-55 REC/PLAY 3.0 Vp-p (1msec./div.)	 IC6003-167 STOP 5.4 Vp-p (0.5µsec./div.)	 IC2201-2, 14, 15 REC/PLAY 2.8 Vp-p (1msec./div.)
 IC2201-29, 30, 31 REC/PLAY 2.8 Vp-p (20msec./div.)	 IC2201-52 REC/PLAY 0.6 Vp-p (0.5µsec./div.)	 IC301-40 STOP 1.0 Vp-p (20µsec./div.) GRAY SCALE	 IC301-85 STOP 1.5 Vp-p (20µsec./div.) COLOUR BAR	 IC301-80 STOP 1.5 Vp-p (20µsec./div.) COLOUR BAR
 IC314-8 STOP 1.2 Vp-p (20µsec./div.) GRAY SCALE	 IC314-21 STOP 0.6 Vp-p (20µsec./div.) GRAY SCALE	 IC1001-9 STOP 1.0 Vp-p (1µsec./div.)	 IC1001-11 STOP 1.4 Vp-p (1µsec./div.)	 IC1001-15 STOP 1.3 Vp-p (1µsec./div.)
 IC1001-27 STOP 0.6 Vp-p (1µsec./div.)	 Q1001-2 STOP 11.8 Vp-p (1µsec./div.)	 Q1003-4 STOP 12.0 Vp-p (1µsec./div.)	 Q1004-2 STOP 18.0 Vp-p (1µsec./div.)	 Q1061-4 STOP 0.2 Vp-p (1µsec./div.)
 Q1062-4 STOP 0.2 Vp-p (1µsec./div.)	 IC801-10 STOP 3.0 Vp-p (10msec./div.)	 IC801-13 STOP 1.0 Vp-p (20µsec./div.) COLOUR BAR	 IC801-15 STOP 3.6 Vp-p (20µsec./div.) COLOUR BAR	

INITIAL/LOGO		ABBREVIATIONS
I	IRIS/SH	Iris/Shutter Control
	IRQ	Interrupt Request
K	KANDO	Digital Gain Up
	KND	Digital Gain Up
	KNEE	Knee Corection (γ Control)
L	LCD	Liquid Crystal Display
	LD	Load Pulse
	LEDCNT	LED Control
	LI-BATT	Lithium Battery
	LSB	Least Significant Bit
	LVL	LPF Switch for Auto Focus
M	MD	Modulation
	MENB	Focus Motor Enable
	MFF	Manual Focus Far
	MFN	Manual Focus Near
	MIX N.R.D	Non Rec Data Mix
	MRST	Focus Motor Reset
	MSB	Most Signal Bit
	MVSYNC	Monitor Vertical Sync Signal
N	N	Near (Focus)
	N/F	Near/Far Focus
	N/P	NTSC/PAL
	NC	No Connection
	NDE	Non Liner De-Emphasis
	NLE	Non Liner Emphasis
	NR	Noise Reduction
	NRD	Non Rec Data
	NRD BLK	No Rec Data Blanking
	NRD CLK	No Rec Data Clock
	NRDBLK	Non Rec Data Blanking
	NRE	Read Enable Input (Low Active)
	NWE	Write Enable (Low Active)
O	OBCNT	Optical Black Control
	OE	Output Enable
	OP	Operation AMP Output
	OSD	ON Screen Display
	OVL	Overlap Pulse
	OZ	Optical Zoom
P	PAJ	Picture Control
	PB1-3	PNP Base 1-3
	PBCTL	Play Back Control
	PBCTL	Pre-Branking Control
	PBLK	Pre-Branking (Pulse)
	PCBM	Carrier Balance
	PED	Pedestal
	PEDECNT	Pedestal Control
	PREAMP	Pre-AMP
	PREBLK	Pre-Blanking
	PT	Protect for V Voltage
	PWM	Pulse Width Modulation
R	R/B	Read/Busy
	R-Y KB	R-Y Carrier Balance
	RAD	Reed Address Data
	RAE	Read Address Enable
	RE	Read Enable
	RE	Rotary Erase Head
	REC CCNT	Rec Current Control
	RECCTRL	Recording Control Pulse
	RERASE	Rotary Erase Head
	RST	Reset
	RSTPWD	Reset Power Down Input
	RSTR	Reset Read
	RSTW	Reset Write

INITIAL/LOGO		ABBREVIATIONS
R	RW	Read Write
	RWAE	Read Write Enable
S	S PHOT	Supply Photo Transistor
	SDET	S-VHS Detect
	STAB	S-VHS Tab Switch
	ST5V	Safety Tab 5V
	STAB	Safety Tab Switch
	SNS LED	Sensor LED
	SCK/SCLK	Serial Clock
	SBD	Serial Data
	SBI	Serial Data Input
	SBO	Serial Data Output
	SO	Serial Data Output
	SIOC	Serial In/Out Conrol
	SH/IRIS	SHUTTER/IRIS CONTROL
	S/S	Start/Stop
	SUB CNT	Sub Control
	SSG	Sync Signal Generator
T	T PHOT	Take-up Photo Transisitor
	TBC	Time Base Control
	TL	Torque Limit
	TRFIX	Tracking Fix
	TRIWAVE	Tracking Wave
	TRP	Tracking Position
U	U/V SEL	R-Y/B-Y Select Signal
	UV SEL	R-Y/B-Y Select Signal
V	V1-V4	V. CCD Drive Pule
	VB	VH Filter Switching
	VCO	Voltage Control Oscillator
	VCP	Shift Clock Output for Vertical Drive
	VCTRL	Voltage Charge Control
	VD	Vertical Drive Pulse
	VDREC	Video Delayed Rec
	VIN	Video In
	VITC	Vertical Interval Time Code
	VL	Low Voltage
	VM	Motor Voltage
	VMD1-3	Electric Shutter Mode
	VMODE	NTSC/PAL Select Switch
	VMVH	VH Filter Switching
	VORP	Video Overlap
	VRB	Voltage Refference Bottom
	VREF1R3V	Refference Voltage 1.3V
	VREF3R3V	Refference Voltage 3.3V
	VREFH	Refference Voltage High Side
	VREFL	Refference Voltage Low Side
	VRI	Refference Voltage Input
	VRO	Refference Voltage Output
	VRT	Voltage Refference Top
	VSS	Vertical Sync Signal
W	WAD/WAE	Write Address Enable
	WB	White Balance
	WE	Write Enable
	WEM	Memory Write Enable
	WHD	Wide Horizontal Drive Pulse
Y	YNCST	Noize Canceller
	YNR	Noize Reduction
Z	Z. ENC	Zoom Encoder
	Z. MIC	Zoom Mic
	ZENC	Zoom Encoder Output
	ZMT(+)/(–)	Zoom Motor (+)/(–)
	ZMTER	Zoom Motor Tele Side
	ZMW	Zoom Motor Wide Side

INITIAL/LOGO		ABBREVIATIONS
A	A. TR	Auto Tracking
	ABSF	Focus Encoder Input
	AD REC	Audio Delaied REC
	ADCLK	Analogue Digital Clock
	ADCNT	Analogue Digital Control
	ADCS	Analogue Digital Chip Select
	AE	Auto Expose
	AECNT	Auto Expose Control
	AEIRQ	Auto Expose Interrupt Request
	AFADE	Audio Fade
	AGCCNT	Automatic Gain Control Control
	AGS	Anti Ground Shooting
	ALCCNT	Auto Level Control Control
	ALCMAIN	Auto Level Control Drive
	AMUT	Audio Mute
	AORP	Audio Overlap Pulse
	APCNT	Aperture Control
	APS	Auto Power Save
	ARTV	Artifical Vertical Sync
	ATR	Auto Tracking
	AVDD	Analogue VDD
	AVSS	Analogue Ground
	AWTB	Auto White Balance B-Y
	AWTR	Auto White Balance R-Y
B	B-Y KB	B-Y Carrier Balance
	BACK	Back-up
	BCBM (B-Y)	B-Y Carrier Balance
	BCBM (R-Y)	R-Y Carrier Balance
	BFA	Burst Flug for Encoder
	BFND	Burst Flag Pulse
	BFO/BFI	Burst Flug Input/Output
	BL	Back Light
	BLC O, I	Back Light Y Control Out, In
	BLD I/O	Back Light Drive Input/Output
	BLK	Blanking Pulse
	BLK I/O	Blanking Pulse In/Out
	BM	Balance Modulator
	BUF	Buffer
C	C CNT	Colour Control
	C/N	Carrier/Noise
	CAMCLK	Camera Clock
	CAP R/F/S	Capstan Revers (H)/Stop (M)/Foward (L)
	CAPVM	Capstan Motor Current
	CASDWN	Cassette Down
	CBLK	Composite Blanking Pulse
	CCW	Counter-Clockwise
	CDS	Correlate Double Sampling Signal
	CFEM	Chrominance Memory Signal
	CGC	Chrominance Gain
	CH1	Channel 1 (Odd Field)
	CHR MIX	Character Mix
	CL/ CLK	Clock
	CMO	Chroma Memory Output
	CMODE	Camera Mode
	CO 0-7	Chrominance Output 0 to 7 (Digital)
	COM	Common
	CP	Clamp Pulse
	CPOB	Clamp Pulse for Optical Blanking
	CPS	Composite Signal
	CRST	Camera Reset
	CS	Chip Select

INITIAL/LOGO		ABBREVIATIONS
C	CS 0-7	Chrominance Signal Out 0-7
	CSEL	Clock Phase Select
	CW	Clockwise
	CYLVM	Cylinder Motor Current or Power
D	D MODE	Digital Mode Switch Signal
	DAC	Digital Analog Converter
	DAC	Digital Analogue Converter
	DB 0-7	Data 0-7
	DCLR	Digital Clear
	DCP	Digital Clamp Pulse
	DICLK	Digital Clock
	DIS	Digital Image Stabilizer
	DISCS	Dis Chip Select
	DISP	Display
	DL	Delay Line
	DOCTL	Data Output Control
	DODAT	Serial Data (to D/A Converter)
	DRK	Dark
	DS	Double Sampling Pulse
	DS 1, 2	Double Sampling Pulse
	DSP	Digital Signal Processor
	DVDD	Digital VDD
	DVSS	Digital Ground
	DZ	Digital Zoom
E	E Snap	Electric Snap Shot
	E2P	EEPROM
	ECM	Electric Condencer Mic
	EE CS	EEPROM Chip Select
	EEPROM	Electric Erasable Programable Read Only Memory
	ENV	Enverope
	EQ	Equalizer
	EXT DC	External DC (AC Adaptor)
	EZOOM	Electric Zoom
F	F	Far (Focus)
	FCK	Clock
	FENC	Focus Encoder
	FM0-7	Field Memory 0-7
	FMCS	Chip Select for FM-Audio
	FMDREC	FM Audio Delayed REC
	FMOEM	Field Memory Enable
	FMT 1-4	Focus Motor Terminal 1-4
	FNO	F Value
G	GCNT	Gain Control
	GSW	Ground for Switching Power
H	H 1, 2	H. CCD Drive Pulse
	HASW	HEAD AMP SW
	HBRST	High Bright Set
	HCLR	High Clear
	HCP	Shift Clock for Horizontal Drive
	HEX	Hexadecimal
	HLT	High Bright Signal
	HSS	Horizontal Sync Signal
	HSS	High Speed Shutter
I	INTER	Interval Recording
	INV	Inverter
	IOU	R-Y Analogue Signal Output
	IOV	B-Y Analogue Signal Output
	IRDET	Infrared Rays Detection



Using the 0 Lux Night View Function together with the Motion-Sensor-Controlled Recording Function in Dark Places without Any Illumination

If you use the 0 Lux Night View Function together with the Motion-Sensor-Controlled Recording Function, recording starts automatically when the Movie Camera's built-in Motion Sensor detects some movement in the picture. This combined function is convenient for easy, unattended animal observation recordings at night.

1 Set the [0 LUX ON/OFF] Switch to [ON] to make the [0LUX] Indication appear.

2 Press the [MENU] Button.
- The [MAIN MENU1] Menu appears.

3 Press the [ITEM] Button repeatedly to select [M.SENSOR].

4 Press the [SET] Button to select [ON].

5 Press the [MENU] Button to exit the menu.
- The Motion Sensor Function Stand-by [STDBY] Indication appears.

Cancelling the 0 Lux Night View Function and Motion-Sensor-Controlled Recording Function during Stand-by

Set [M.SENSOR] on the [MAIN MENU1] Menu to [OFF] and then set the [0 LUX ON/OFF] Switch to [OFF].

Cancelling the 0 Lux Night View Function and Motion-Sensor-Controlled Recording Function during Recording

Press the Recording Start/Stop Button for more than 2 seconds and then set the [0 LUX ON/OFF] Switch to [OFF].

If you use the Motion Sensor Function together with the 0 Lux Night View Function, the [MOTION SENSOR] Indication flashes, and recording may not be possible in some cases.

Subjects and Recording Conditions for Which the Manual Mode Is More Suitable

The following subjects and recording situations are not suitable for recording in the Full Auto Mode. In these cases, adjusting the white balance and/or focus manually will provide more beautiful pictures. Also read the pages related to the manual adjustment indicated in parentheses.

1. **White Balance**

   To adjust the white balance manually, see "Recording with Manual White Balance Adjustment".

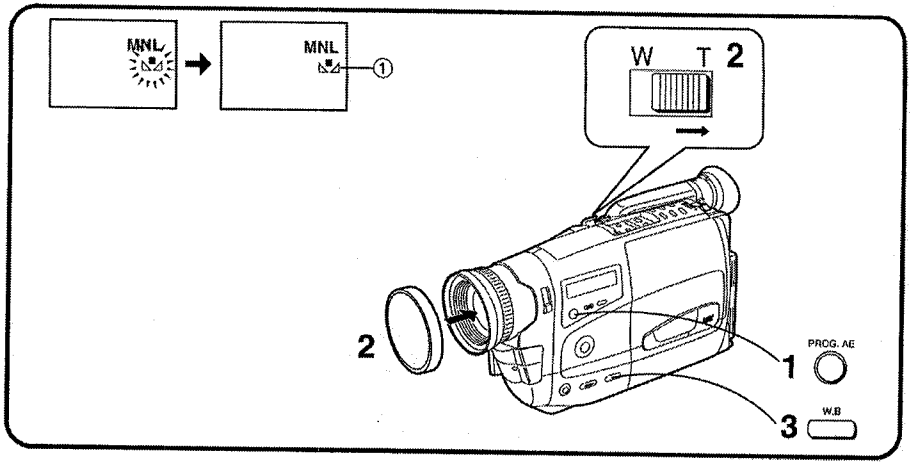
2. **Focus**

   To adjust the focus manually, see "Recording with Manual Focus Adjustment".

- If you select the Manual Mode, the [MNL] Indication appears in the Finder and the [MNL] Indication in the Multi Info Window.
- During recording, it is not possible to change the recording mode ([AUTO], [ ], [ ], [ ], [ ], [ ]), even if you press the [PROG. AE] Button.

■ Subjects and Recording Conditions Not Suitable for Recording in the Full Auto Mode (problematic adjustments in parentheses)

- Subjects with dark surfaces (White Balance, Focus)
- When moving the Movie Camera from outdoors to indoors while recording (White Balance)
- Subjects lit by different light sources (White Balance)
- Subjects lit by mercury-vapour or natrium lamps (White Balance)
- Subjects with shiny surfaces or a lot of light reflection (Focus)
- Subjects with weak contrast (Focus)
- Subjects with part of it near and part of it far away from the Movie Camera (Focus)
- Subjects without vertical contours (Focus)
- Subjects with fast movement (Focus)
- Subjects behind moving objects (Focus)
- Subjects behind glass covered by dirt, dust or water drops (Focus)



Recording with Manual White Balance Adjustment

With this Movie Camera, you can also adjust the white balance manually.
Use this mode for special subjects and recording conditions, such as listed, for which the Full Auto Mode is not suitable, and for light sources outside the range ❶. Use it also when you want to manually adjust the white balance for each new scene as professionals do.

1 Press the [PROG. AE] Button repeatedly until an indication other than [AUTO] appears.

2 Attach the White Lens Cap and zoom in until the entire screen is white.

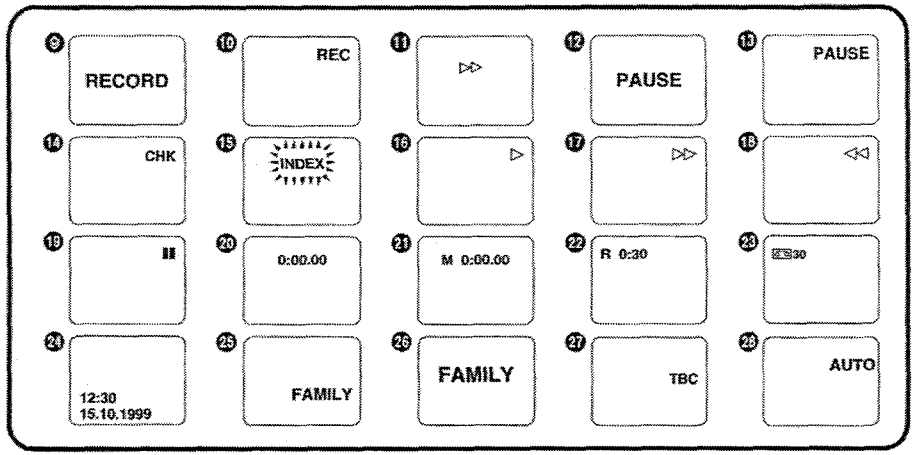
3 Aim the Movie Camera at the subject that you want to record and then keep the [W.B] Button pressed until the [MNL] Indication ① stops flashing and remains lit.

- When the Sepia Mode, Black & White Mode, Gain-up Mode, or 0 Lux Night View Mode is being used, or when the Movie Camera is set within the digital zoom range (23×–300×), it is not possible to adjust the white balance manually even if you press the [W.B] Button, or to cancel the manually adjusted white balance setting.
- In dark surroundings, it may not be possible to manually adjust the white balance. In this case, use the Full Auto Mode.

Cancelling the Manual White Balance Mode

Press the [W.B] Button once. Or, press the [PROG. AE] Button repeatedly until the [AUTO] Indication appears.

The flashing [MNL] Indication indicates that the manually adjusted white balance setting is being maintained. This setting is maintained until you manually adjust the white balance again or change back to recording in the Full Auto Mode.



■ Recording and Playback Indications

⑨ **Recording Mode (large indication)**

⑩ **Recording Mode (small indication)**

⑪ **Tape Movement during Recording**

⑫ **Recording Pause Mode (large indication)**

⑬ **Recording Pause Mode (small indication)**

⑭ **Recording Check Mode**

⑮ **Index Signal Recording Mode**

An index signal is automatically recorded (and the [INDEX] Indication flashes briefly while it is being recorded) when you:

- Start recording after connecting the AC Adaptor or attaching the Battery.
- Start recording after inserting a cassette.
- Start recording after pressing the [VCR/CAMERA] Button to change from the VCR to the Camera Mode.

The recording of index signals makes it possible to use the VHS Index Search or Intro Scan Function during playback on a VCR equipped with these functions.
(Refer to the operating instructions of your VCR.)

⑯ **Playback Mode**
Camera Search Mode

⑰ **Fast Forward/Cue Mode**

⑱ **Rewind/Review Mode**
Camera Search Mode

⑲ **Still Playback Mode**

⑳ **Elapsed Tape Time**

When the tape is rewound further than the position [0:00.00], the minus sign [–] appears in front of the Elapsed Tape Time Indication.

㉑ **Elapsed Tape Time with activated Memory Stop Function**

㉒ **Remaining Tape Time**

㉓ **Tape Length**

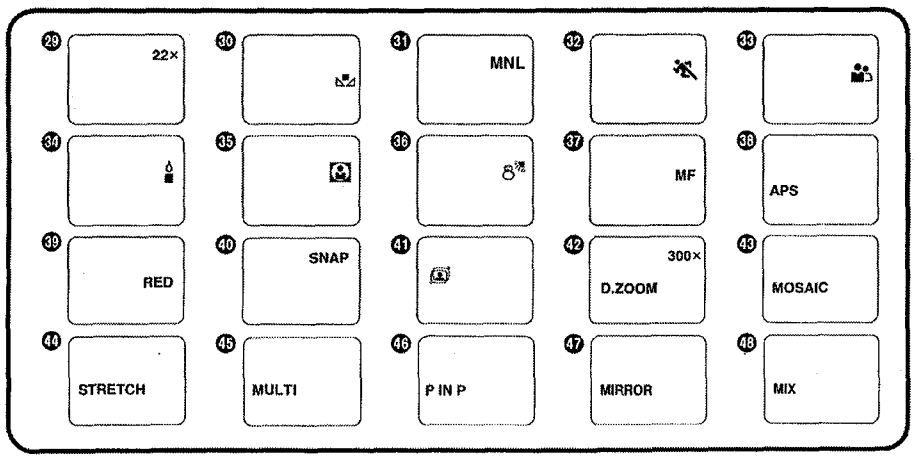
㉔ **Date and Time**

㉕ **Title (small indication)**

㉖ **Title (large indication)**

㉗ **Time Base Corrector**

㉘ **Full Auto Mode**



㉙ **Zoom Magnification**

㉚ **Manual White Balance Mode**

㉛ **Manual Recording Mode**

㉜ **Sports Mode**

㉝ **Portrait Mode**

㉞ **Low Light Mode**

㉟ **Spotlight Mode**

㊱ **Surf & Snow Mode**

㊲ **Manual Focus Mode**

㊳ **Power Save Mode**

㊴ **Colour Indication for Digital Image**

㊵ **Snapshot Recording Mode**

㊶ **Super Image Stabilizer Mode**

㊷ **Digital Zoom Mode**

㊸ **Mosaic Mode**

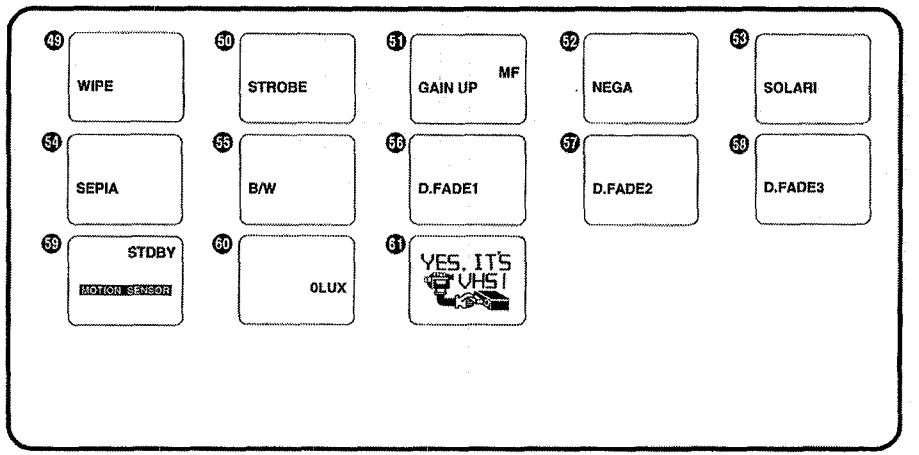
㊹ **Stretch Mode**

㊺ **Multi Image Mode**

㊻ **Picture-in-Picture Mode**

㊼ **Mirror Mode**

㊽ **Mix Mode**



㊾ **Wipe Mode**

㊿ **Strobe Mode**

(51) **Gain up Mode**

(52) **Nega Mode**

(53) **Solarisation Mode**

(54) **Sepia Mode**

(55) **Black-and-White Mode**

(56) **Digital Fade 1 Mode**

(57) **Digital Fade 2 Mode**

(58) **Digital Fade 3 Mode**

(59) **Motion-Sensor-Controlled Recording Function Stand-by Mode**

(60) **0 Lux Night View Mode**

(61) **Demonstration Mode**

Demonstration Mode

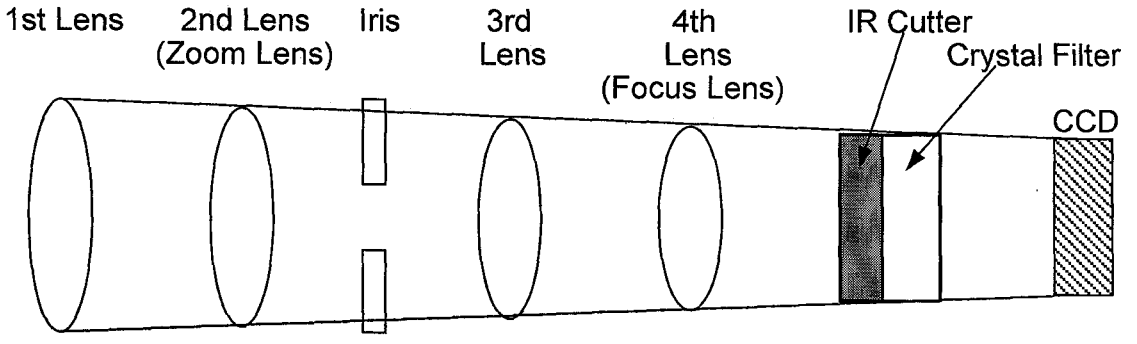
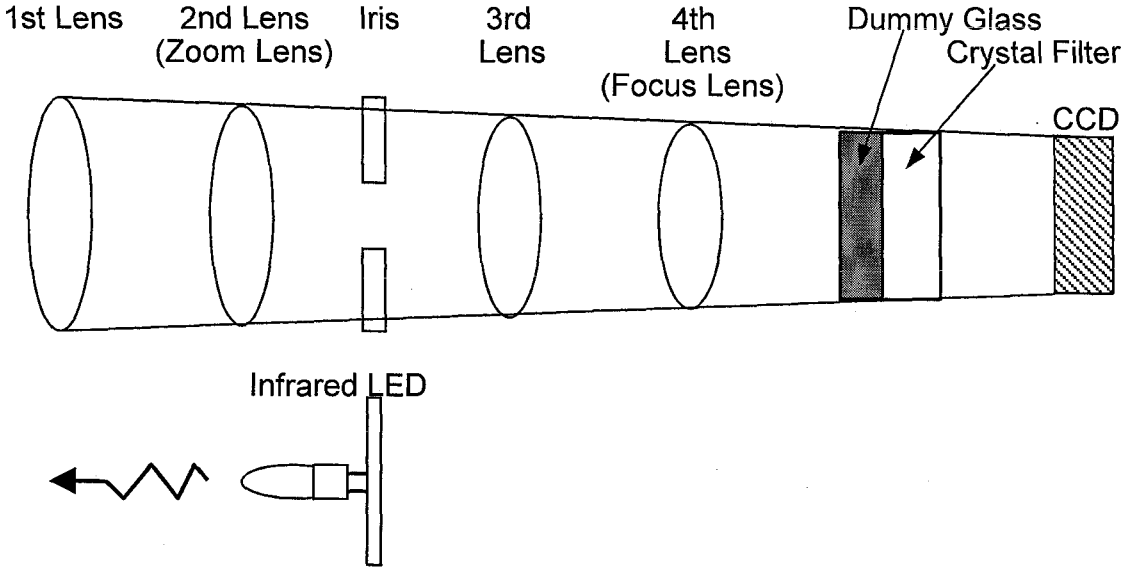
If you connect the AC Adaptor to the Movie Camera, turn the Movie Camera on without any cassette inserted, and leave it on for approximately 10 minutes without performing any operation, it automatically switches over to the Demonstration Mode. The Movie Camera remains in this mode until you turn it off and disconnect the AC Adaptor.

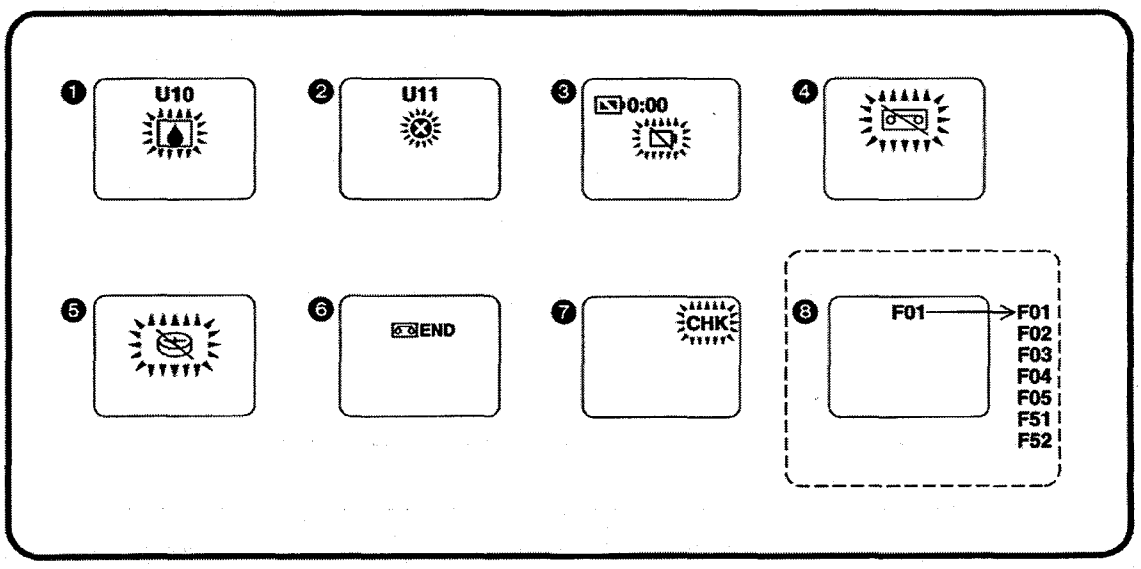
Cancelling the Demonstration Mode

Set [DEMO MODE] on the [MAIN MENU2] Menu to [OFF].
Or, turn in the [POWER] Switch to turn the Movie Camera off, then turn it out again while pressing the [STOP] Button. (This cancels the Demonstration Mode even if [DEMO MODE] on the [MAIN MENU2] Menu is still set to [ON].)

Reactivating the Demonstration Mode

Set [DEMO MODE] on the [MAIN MENU2] Menu to [ON].
Or, turn out the [POWER] Switch while pressing the [PLAY] Button. (This reactivates the Demonstration Mode even if [DEMO MODE] on the [MAIN MENU2] Menu is still set to [OFF].)

Normal Mode	
	If the CCD image sensor receives the infrared ray, it is not possible to correctly adjust the White Balance. So, the IR(infrared) cut filter is usually set between the lens and CCD.
0 Lux Mode	
	The refractive index of light and focal length are changed if taking off the IR cut filter. Therefore, when the 0 Lux Night View mode, the Dummy Glass is substituted for IR cut filter in lens unit.



Indications

■ **Warning/Alarm Indications**

❶ Condensation

❷ Video Head Clogging

❸ Remaining Battery Power

When the remaining battery power is used up, the Movie Camera automatically switches off. Replace the Battery with a fully charged one.

❹ Cassette

No cassette is inserted. Or the tab of the inserted cassette is broken out. Insert a cassette with an intact tab.

❺ Built-in Lithium Battery

The built-in Lithium Battery is exhausted. Charge it.

❻ End of the Tape

When the tape has reached its end, this indication appears. Insert a new cassette.

❼ Anti-Ground Recording

❽ Error Code

(Error codes are information for service personnel.)

If the [F] Indication with a 2-digit number appears, a malfunction has occurred.

If the indicated error code is between [F01] and [F05], the Movie Camera will turn off automatically one minute after the [CAMERA] Lamp has started to flash.

If the indication is [F51] or [F52], the Movie Camera will not turn off automatically.

F01: Locked Take Up-Reel

F02: Locked Supply-Reel

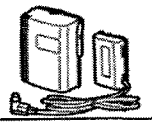
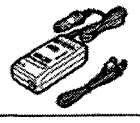
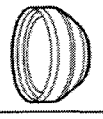
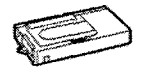
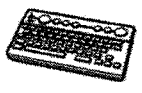
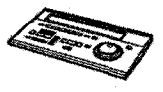
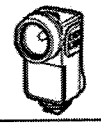
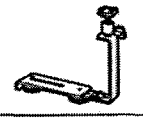
F03: Locked Unloading Mechanism

F04: Locked Loading Mechanism

F05: Locked Cylinder

F51: Locked Focus Motor

F52: Locked Zoom Motor

1. VW-AS7E	2. CGR-V610	3. CGR-V620	4. CGR-V816 	5. VW-KBC7E 	6. VW-RF7E /EG
7. VW-K10E	8. VW-LF43WE	9. VW-LT4314WE 	10.VW-LW4307WE	11.VZ-CT55E	12.VW-TCA7E 
13.VW-VT1E 	14.VW-EC1E	15. VW-EC500E 	16.VZ-LDR10E 	17.VW-SK11E 	

Optional Accessories

1. AC Adaptor
2. Battery Pack (Lithium-Ion)
3. Battery Pack (Lithium-Ion)
4. Battery Pack (Lithium-Ion)
5. Car Battery Charger
6. RF Adaptor
7. 5-Pin Synchro Edit Cord
8. Filter Kit
9. Tele Conversion Lens
10. Wide Conversion Lens
11. Tripod
12. Cassette Adaptor
13. Video Titler
14. Editing Controller
15. Editing Controller
16. IR/Video DC Light (Halogen & Infra-red)
    (It requires the Shoe Adaptor for attaching to the Movie Camera.)
17. Shoe Adaptor (for attaching the IR/Video DC Light)

Some accessories are not available in some countries.

Ref No.	IC6001										IC6002									
MODE	1	2	3	4	5	6	7	8			1	2	3	4	5	6	7	8		
STOP	2.7	0.9	1.6	0	1.4	0	2.4	3.0			3.0	0.5	0.5	0	0.3	2.7	2.6	3.1		
PLAY	2.7	0.9	1.6	0	1.4	0	2.4	3.0			3.0	0.5	0.5	0	0.3	2.7	2.6	3.1		
FF	2.7	0.9	1.6	0	1.4	0	2.4	3.0			3.0	0.5	0.5	0	0.3	2.7	2.6	3.1		
Ref No.	IC6003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.9	2.9	2.9	2.9	0	0	2.9	0	0	0	0	2.9	2.4	2.9	2.9	2.9	2.9	0	2.9	2.9
PLAY	2.9	2.9	2.9	2.9	0	2.9	2.9	0	0	0	2.9	2.9	2.4	2.9	1.5	2.9	2.9	0	2.9	2.9
FF	2.9	2.9	2.9	2.9	0	2.9	2.9	0	0	0	2.9	2.9	1.3	2.9	1.5	2.9	2.9	0	2.9	2.9
Ref No.	IC6003																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	1.1	0	0	0	2.9	2.9	3.0	2.9	—	—	—	—	—	—	—	1.2	0	0.6
PLAY	0	0	1.1	0	0	0	2.9	2.9	3.0	2.9	—	—	—	—	—	—	—	0.3	0	0.1
FF	0	0	1.1	0	0	0	2.9	2.9	3.0	2.9	—	—	—	—	—	—	—	1.2	0	0.9
Ref No.	IC6003																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	1.2	1.3	1.5	0.8	1.5	1.2	1.2	2.9	2.9	2.9	—	2.9	2.9	0	0	2.9	2.9	0	0	2.9
PLAY	0.7	0.3	0.6	0.1	2.3	0.7	0.3	2.9	0	2.9	—	2.9	2.9	0	0	2.9	2.9	0	0	1.4
FF	0.9	0.8	1.5	1.2	1.5	1.2	1.2	2.9	2.9	2.9	—	2.9	2.9	0	0	2.9	2.9	0	0	2.9
Ref No.	IC6003																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	1.4	1.5	2.9	—	0	0	2.9	2.9	2.6	0	2.9	2.9	2.9	0	0	0	0	—	—
PLAY	0	2.9	0	2.9	—	2.9	2.9	2.9	0	2.9	0	0	0.7	0	0	0	0	0	—	—
FF	0	1.4	1.5	2.9	—	0	2.9	0	2.9	2.6	2.9	2.9	2.9	2.9	0	0	0	0	—	—
Ref No.	IC6003																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0	2.9	0	2.9	0	0	2.9	2.9	0	1.6	1.0	2.9	1.5	2.9	1.7	1.5	0	0	0	1.7
PLAY	0	2.9	0	2.9	0	0	2.9	2.9	0	1.4	1.0	2.9	1.5	2.9	1.3	1.5	0	0	0	0.4
FF	0	2.9	0	2.9	0	0	2.9	2.9	0	1.5	1.0	2.9	1.5	2.9	1.6	1.5	0.2	0	0	1.7
Ref No.	IC6003																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	1.7	2.1	2.9	2.9	2.9	2.9	0	2.7	0.1	2.9	0.1	0	2.9	0	2.8	2.6	2.9	—	2.9	0
PLAY	1.7	2.1	2.9	2.9	0	2.9	0	2.7	0	2.9	0.1	0	2.9	0	2.8	2.6	2.9	—	2.9	0
FF	1.7	2.1	2.9	2.9	2.9	2.9	0	2.7	0.1	2.9	0.1	0	2.9	0	2.8	2.6	2.9	—	2.9	0
Ref No.	IC6003																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	0	2.9	2.9	2.9	0	2.9	2.9	1.5	1.5	—	0	0	0	0.2	2.9	—	0	0	0	1.6
PLAY	0	2.9	2.9	2.9	0	2.9	2.9	1.5	1.5	—	0	0	0	0.2	2.9	—	0	0	1.2	1.6
FF	0	2.9	2.9	2.9	0	2.9	2.9	1.5	1.5	—	0	0	0	0.2	2.9	—	0	0	1.1	1.6
Ref No.	IC6003																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
STOP	0	0	0	0	0	3.0	2.9	0	0.3	0.1	2.6	2.9	1.1	1.5	2.9	—	2.9	0.1	2.9	0
PLAY	0	0	2.9	0	0	3.0	2.9	0	0.3	0.1	2.6	1.5	1.1	1.5	2.9	—	2.9	0.1	2.9	0
FF	0	0	0	0	0	3.0	2.9	0	0.3	0.1	2.6	1.5	1.1	1.5	2.9	—	2.9	0.1	2.9	0
Ref No.	IC6003																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
STOP	2.9	0	0	0	0	2.6	1.5	0	0	2.9	0	0	2.9	—	—	—	0	2.9	2.9	2.9
PLAY	2.9	0	0	0	0	2.6	1.5	0	0	2.9	0	0	2.9	—	—	—	0	2.9	2.9	2.9
FF	2.9	0	0	0	0	2.6	1.5	0	0	2.9	0	0	2.9	—	—	—	0	2.9	2.9	2.9
Ref No.	IC6003																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
STOP	2.9	0	0	2.9	0	0	2.9	2.9	2.9	2.9	2.9	2.6	0	0.6	2.9	1.5	2.9	0	2.9	0.7
PLAY	2.9	0	0	2.9	0	0	2.9	2.9	2.9	2.9	2.9	2.6	0	0.6	2.9	0	2.9	0	2.9	0.7
FF	2.9	0	0	2.9	0	0	2.9	2.9	2.9	2.9	2.9	2.6	0	0.6	2.9	2.9	2.9	0	2.9	0.7
Ref No.	IC6003																			
MODE	202	202	203	204	205	206	207	208												
STOP	2.9	0.7	2.9	2.6	2.9	2.8	2.6	—												
PLAY	2.9	0.1	2.9	2.6	2.9	2.8	2.6	—												
FF	2.9	0.7	2.9	2.6	2.9	2.8	2.6	—												
Ref No.	IC6004										IC6005									
MODE	1	2	3								1	2	3	4	5	6	7	8		
STOP	0	3.7	7.6								0	7.1	4.8	0	0	2.9	0.3	0		
PLAY	0	3.7	7.6								0	7.1	4.8	0	0	2.9	0.3	0		
FF	0	3.7	7.6								0	7.1	4.8	0	0	2.9	0.3	0		
Ref No.	IC6006										IC6007									
MODE	1	2	3	4	5	6	7	8			1	2	3	4						
STOP	1.4	0.6	0.7	0	2.6	0.3	4.6	4.8			3.0	2.6	—	0						
PLAY	1.4	0.6	0.7	0	2.6	0.3	4.6	4.8			3.0	2.6	—	0						
FF	1.4	0.6	0.7	0	2.6	0.3	4.6	4.8			3.0	2.6	—	0						
Ref No.	IC6008										IC6009									
MODE	1	2	3	4	5	6	7	8			1	2	3	4						
STOP	3.0	3.0	3.0	3.0	3.0	3.0	0	0			3.0	3.0	—	0						
PLAY	3.0	3.0	3.0	3.0	3.0	3.0	0	0			3.0	3.0	—	0						
FF	3.0	3.0	3.0	3.0	3.0	3.0	0	0			3.0	3.0	—	0						
Ref No.	IC6010										IC6011									
MODE	1	2	3								1	2	3							
STOP	0	4.5	2.6								0	3.0	4.5							
PLAY	0	4.5	2.6								0	3.0	4.5							
FF	0	4.5	2.6								0	3.0	4.5							

Ref No.	Q6001			Q6002			Q6003			Q6004			Q6005					
MODE	E	C	B	E	C	B	E	C	B	1	2	3	1	2	3	4	5	6
STOP	2.5	4.8	2.2	0	0.3	0	0.1	7.6	0	4.2	7.0	4.5	0	2.3	0.2	4.6	0.1	4.6
PLAY	2.7	4.8	2.4	3.0	3.0	2.4	0.1	7.6	0	4.2	7.0	4.5	0	2.3	0.2	4.6	0.1	4.6
FF	3.0	4.8	2.6	3.0	3.0	2.4	0.1	7.6	0	4.2	7.0	4.5	0	2.3	0.2	4.6	0.1	4.6

Ref No.	Q6006					
MODE	1	2	3	4	5	
STOP	0.5	0	0	2.8	0	
PLAY	0.5	0	0	2.8	0	
FF	0.5	0	0	2.8	0	

Ref No.	QR6001			QR6002			QR6004						QR6005			QR6007		
MODE	E	C	B	E	C	B	1	2	3	4	5	6	E	C	B	E	C	B
STOP	3.7	3.7	2.6	0	0	3.0	3.0	0	-1.3	3.0	3.0	2.9	3.0	0	3.0	0	0	2.9
PLAY	3.7	3.7	2.6	0	0	3.0	3.0	3.0	2.9	3.0	0	-1.0	3.0	0	3.0	0	0	2.9
FF	3.7	3.7	2.6	0	0	3.0	3.0	3.0	3.0	3.0	0	-1.0	3.0	0	3.0	0	0	2.9

Ref No.	QR6008			QR6009			QR6010						QR6012			QR6013		
MODE	E	C	B	E	C	B	1	2	3	4	5		E	C	B	E	C	B
STOP	3.3	3.4	4.8	0	3.0	0	2.8	0	2.5	0.3	0.1		7.0	7.0	0	3.0	3.0	0
PLAY	3.3	3.4	4.8	0	3.0	0	2.8	0	2.5	0.3	0.1		7.0	7.0	0	3.0	3.0	0
FF	3.3	3.4	4.8	0	3.0	0	2.8	0	2.5	0.3	0.1		7.0	7.0	0	3.0	3.0	0

Ref No.	QR6014			QR6050														
MODE	E	C	B	1	2	3	4	5										
STOP	0	7.3	0	0	0	0	0	0										
PLAY	0	7.3	0	0	0	0	0	0										
FF	0	7.3	0	0	0	0	0	0										

Camera/Main C.B.A.

Integrated Circuit		
IC301	D-6	F
IC302	E-5	F
IC303	D-3	C
IC304	D-5	F
IC308	D-3	C
IC309	D-4	C
IC313	C-6	F
IC314	E-6	F
IC315	E-3	C
IC316	C-4	C
IC701	D-2	C
IC702	D-8	F
IC706	D-2	C
IC711	E-2	C
IC1001	B-3	F
IC2201	E-1	C
IC2202	E-8	F
IC2203	E-8	F
IC3001	B-2	C
IC5001	B-4	C
IC5501	B-7	F
IC6001	D-4	F
IC6002	E-4	F
IC6003	D-5	C
IC6004	C-3	F
IC6005	E-8	C
IC6006	E-8	C
IC6007	D-3	F
IC6008	E-4	F
IC6009	D-3	F
IC6010	C-3	F
IC6011	C-3	F
IC6201	C-8	F
IC6202	B-7	F

Transistor		
Q201	E-6	F
Q301	C-3	C
Q302	C-4	C
Q304	E-5	F
Q701	D-2	C
Q702	E-1	C
Q703	E-8	F
Q704	E-1	C
Q706	D-8	F
Q707	E-1	C
Q708	E-1	C
Q780	A-9	F
Q781	A-1	C
Q1001	B-2	F
Q1003	B-2	F
Q1004	A-2	F
Q1010	A-7	C
Q1061	B-1	F
Q1062	A-1	F
Q3001	B-4	F
Q3002	B-4	F
Q3003	B-4	F
Q3004	B-4	C
Q3005	B-5	C
Q3006	C-7	F
Q3007	C-7	F
Q3009	B-5	F
Q3010	B-4	F
Q4001	C-8	F
Q4002	D-1	C
Q4003	C-8	F
Q4004	C-2	C
Q4006	B-8	F
Q4007	C-8	F
Q4009	C-8	F
Q4014	C-7	F
Q4801	C-2	C
Q4802	B-1	C
Q4804	B-1	C
Q4805	B-1	C
Q5001	A-4	C
Q5002	A-4	C
Q5003	A-5	C
Q5501	C-3	C
Q5502	B-4	C
Q5503	A-2	C
Q5504	C-7	F
Q6001	C-4	F
Q6002	D-4	F
Q6003	D-3	F
Q6004	B-6	C
Q6005	D-5	F
Q6006	D-3	F

Transistor & Resistor		
QR301	C-4	C
QR302	C-4	C
QR303	D-4	C
QR304	C-4	C
QR305	D-4	C
QR701	E-8	F
QR781	D-9	F
QR782	A-2	C
QR1001	A-7	C
QR1005	A-7	C
QR1061	A-7	C
QR1701	E-7	C
QR1702	E-7	C
QR2002	F-2	C
QR3003	B-5	F
QR3004	B-5	F
QR3005	B-5	F
QR3006	D-5	F
QR3007	E-5	F
QR4003	C-8	F
QR4004	C-9	F
QR4005	C-2	C
QR4008	C-8	F
QR5502	B-4	C
QR6001	E-4	F
QR6002	E-3	F
QR6005	D-3	F
QR6007	C-5	C
QR6008	A-5	C
QR6009	C-3	F
QR6010	D-5	F
QR6012	B-5	C
QR6013	B-5	C
QR6014	C-4	F
QR6050	D-5	F
QR6801	B-8	F

Diode		
D301	C-4	C
D304	E-3	C
D1006	A-2	F
D1007	A-2	F
D1009	A-7	C
D1015	B-8	C
D1020	A-7	C
D1601	C-1	F
D1602	C-1	F
D1603	C-8	C
D1604	C-1	F
D1706	E-7	C
D3001	C-8	C
D3002	B-6	F
D3004	B-4	F
D4001	A-6	F
D6001	E-4	F
D6003	B-6	C
D6004	F-8	C
D6005	B-5	C
D6006	E-4	F
D6007	E-4	F
D6009	F-5	C
D6010	D-7	C
D6011	E-5	F
D6012	D-5	F
D6013	F-5	C
D6014	F-6	C
D6015	F-4	C
D6016	C-4	F
D6017	F-4	C
D6018	D-5	F
D6019	F-4	C
D6020	D-4	C
D6021	F-5	C
D6022	F-6	C
D6023	B-1	C
D6025	F-5	C
D6026	F-5	C
D6027	F-5	C
D6030	E-4	F
D6201	D-4	F

Transformer		
T1001	A-8	C
T4001	C-1	C

Test Point		
CL301	D-6	F
CL302	D-5	F
CL307	D-7	F
CL702	D-8	F

CL1001	B-3	F
CL1002	E-3	F
CL1012	B-4	F
CL3003	B-6	F
CL3004	A-6	F
CL3007	B-7	F
CL3008	B-7	F
CL4002	D-9	F
CL4004	C-8	F
CL5501	B-7	F
CL6001	E-5	F
CL6002	E-5	F
CL6003	E-5	F
CL6005	D-3	F
CL6006	C-4	F
CL6007	D-3	F
CL6011	B-1	F
CL6012	E-4	F
CL6013	F-4	F
CL6014	E-3	F
CL6015	C-1	F
CL6016	C-5	F
CL6017	E-4	F
CL6018	C-7	F
CL6206	F-8	F
CL6208	F-9	F
CKA2	F-5	F
CKA4	F-5	F
CKA6	F-5	F
CKA8	F-5	F
CKA10	F-4	F
CKA11	F-5	F
CKA12	F-5	F
CKA14	F-4	F
CKA16	F-4	F
CKA20	F-4	F
CKA24	F-4	F
CKB3	C-1	F
CKB6	C-1	F
CKC1	F-9	F
CKC2	F-9	F
CKC3	F-8	F
CKC4	E-8	F
CKC5	E-8	F
CKC6	D-8	F
CKC7	D-8	F
CKD2	E-3	F
CKD4	E-2	F
CKE1	A-5	F
CKE5	A-5	F
CKE6	A-6	F
CKE7	A-6	F
CKE9	A-6	F
CKE10	A-6	F
CKE11	A-6	F
CKE12	A-6	F
CKF1	F-6	F
CKF5	F-5	F
CKF6	F-6	F
CKF9	F-6	F
CKF11	F-5	F
CKF13	F-5	F
CKF15	F-6	F
CKF18	F-5	F
CKG1	E-7	F
CKG2	E-7	F
CKG3	E-7	F
CKG4	E-7	F
CKG5	E-7	F
CKG6	E-7	F
CKG7	E-7	F
CKG8	E-7	F
CKG9	E-7	F
CKG10	E-7	F
CKG11	E-7	F
CKG12	E-7	F
CKJ1	D-1	F
CKJ4	E-1	F
CKK2	F-7	F
CKK3	F-7	F
CKK4	F-7	F
CKK5	F-7	F
CKK6	F-7	F
CKK7	F-7	F
CKK8	F-7	F
CKK10	F-7	F
CKK12	F-7	F
CKK13	E-7	F
CKK15	E-7	F
CKK17	E-7	F
CKK18	E-7	F
CKN2	F-1	F
CKN3	F-1	F
CKN6	E-2	F
CKN7	F-1	F
CKN8	E-1	F
CKN9	F-1	F
CKN15	E-1	F
CKN16	F-1	F
CKP1	D-9	F
CKP2	D-9	F
CKP3	D-9	F
CKP4	D-9	F
CKP5	D-9	F
CKP6	E-7	F
CKP7	E-9	F
CKP8	E-9	F
CKP10	E-9	F
CKP11	E-9	F
CKP12	E-9	F
CKP13	E-9	F
CKP14	E-9	F
CKP15	E-9	F
CKP17	E-9	F
CKP18	E-9	F
CKY4	A-5	F
CKY5	B-5	F
CKY8	B-4	F
CKY9	A-4	F
CKY11	A-4	F
CKY12	A-5	F
CKY13	B-5	F
CKY14	B-5	F
CKY15	B-4	F
CKY18	A-5	F
CKY19	B-4	F
CKY20	B-4	F
CKY21	A-4	F
CKY22	A-4	F
CKY23	A-4	F
CKY27	A-4	F
CKY30	A-5	F
CKY31	B-4	F
CKY32	B-4	F
CKY35	B-5	F
CKY36	B-5	F
CKY37	B-5	F
CKY40	A-5	F
CKW2	C-9	F
CKW3	C-9	F
CKW4	D-8	F
CKW6	D-8	F
CKW7	D-8	F
TL1001	B-2	F
TL1002	B-1	F

Connector		
FP701	E-9	F
FP2001	C-2	C
FP2002	F-2	C
FP4001	D-9	F
FP4002	B-9	F
FP5001	A-6	F
FP6001	E-1	F
FP6002	E-2	F
FP6003	F-6	F
FP6004	F-8	F
FP6005	E-1	F
FP6006	F-4	F
P1001	E-3	F
PP301	E-7	F
PP3001	A-4	F
PS1003	C-9	C
PS3009	D-9	C

Crystal Oscillator		
X301	E-3	C
X6001	C-5	C
X6003	E-6	C

Coil		
L301	D-4	C
L302	C-3	C
L303	D-7	F
L304	E-6	F
L305	E-3	C
L306	C-4	C
L307	D-2	C
L316	E-6	F
L322	E-4	C
L703	D-1	C

L1001	B-8	C
L1002	A-8	C
L1003	C-7	C
L1004	B-7	C
L1006	B-3	F
L1007	B-8	C
L1008	C-6	C
L1010	B-6	C
L1011	B-6	C
L1014	B-7	C
L1015	B-3	F
L1061	B-9	C
L1062	A-9	C
L3001	B-4	F
L3002	B-6	F
L3003	A-8	F
L4005	C-9	F
L5001	B-6	F
L5002	B-6	F
L5003	B-5	F
L5004	B-6	F
L5501	B-6	F
L5502	B-7	F
L5503	B-3	C
L5504	A-2	C
L5506	B-4	C
L5507	C-6	F
L6201	D-8	F
LB302	D-3	C
LB303	D-3	C
LB304	D-4	C
LB306	E-4	C
LB309	E-3	C
LB310	E-3	C
LB312	D-5	F
LB1601	B-1	F
LB1602	C-2	F
LB4001	B-1	C
LB6001	C-5	C
LB6002	C-6	C
LB6003	D-3	F
LB6004	D-7	C
LB6005	E-2	F
LB6006	E-2	F
LB6007	E-9	C

Capacitor		
C301	D-3	C
C302	D-4	C
C303	D-7	F
C304	C-6	F
C305	C-6	F
C306	E-5	F
C307	C-4	C
C308	C-6	F
C309	C-3	C
C310	E-6	F
C311	E-3	C
C312	E-3	C
C313	D-6	F
C314	E-6	F
C315	C-6	F
C316	D-3	C
C317	C-5	F
C318	D-8	F
C321	F-4	C
C322	D-6	F
C323	E-4	C
C324	E-4	C
C327	D-5	F
C328	C-4	C
C329	C-5	F
C330	D-3	C
C331	E-6	F
C332	E-7	F
C333	C-6	F
C335	D-5	F
C336	D-3	C
C337	D-3	C
C338	E-6	F
C339	E-6	F
C340	D-4	C
C341	D-4	C
C342	E-4	C
C343	D-4	C
C346	D-4	C
C347	E-6	F
C348	D-4	C
C350	C-4	C
C358	E-4	C
C359	E-3	C
C360	E-6	F
C361	E-4	C
C362	F-4	C
C364	F-3	C
C365	F-3	C
C366	E-4	C
C367	E-3	C
C368	F-6	F
C369	E-3	C
C371	E-6	F
C372	E-6	F
C374	E-4	C
C375	E-7	F
C377	E-7	F
C382	F-3	C
C383	C-6	F
C385	B-5	C
C386	C-5	C
C387	C-4	C
C388	C-3	C
C701	D-2	C
C702	E-7	F
C703	E-8	F
C704	D-1	C
C705	E-8	F
C711	D-1	C
C713	E-8	F
C715	E-2	C
C716	D-8	F
C718	E-2	C
C719	E-7	F
C721	D-8	F
C724	D-2	C
C727	D-2	C
C1001	B-8	C
C1003	B-8	C
C1004	B-6	C
C1005	B-7	C
C1008	B-2	F
C1009	B-7	C
C1010	B-6	C
C1012	A-2	F
C1014	A-3	F
C1017	A-2	F
C1019	B-6	C
C1020	A-2	F
C1022	B-6	C
C1024	A-3	F
C1025	A-7	C
C1026	B-7	C
C1027	A-7	C
C1028	A-7	C
C1029	B-7	C
C1030	B-7	C
C1032	B-7	C
C1033	B-3	F
C1034	B-3	F
C1035	A-3	F
C1036	B-7	C
C1037	B-7	C
C1041	C-1	F
C1046	A-7	C
C1051	B-2	F
C1055	B-8	C
C1057	B-2	F
C1063	B-8	C
C1064	A-8	C
C1065	B-8	C
C1066	A-8	C
C1071	B-1	F
C1080	B-3	F
C1081	B-7	C
C1602	C-8	C
C1603	C-8	C
C1708	E-7	C
C2001	F-1	C
C2009	F-9	F
C2020	F-8	F
C2033	F-2	C
C2043	F-2	C
C2202	F-1	C
C2203	F-1	C
C2207	F-1	C
C2208	E-1	C
C2209	E-1	C
C2210	F-9	F
C2212	F-8	F
C2213	F-8	F
C2214	F-8	F
C2216	F-8	F
C2217	F-9	F
C2219	F-1	C
C2220	F-9	F
C2221	F-9	F
C2222	F-9	F
C2223	E-9	F
C2224	F-8	F
C2225	F-8	F
C2226	F-8	F
C2227	E-8	F
C2233	E-9	F
C3001	A-4	C
C3002	C-7	F
C3003	B-5	C
C3004	B-8	F
C3005	B-3	C
C3006	A-3	C
C3008	A-3	C
C3009	B-7	F
C3010	C-1	F
C3012	B-5	C
C3016	A-3	C
C3017	A-7	F
C3018	A-7	F
C3019	A-3	C
C3020	A-2	C
C3022	A-7	F
C3023	A-2	C
C3024	A-2	C
C3026	A-2	C
C3027	A-1	C
C3028	B-6	C
C3029	C-3	C
C3030	A-2	C
C3031	A-2	C
C3033	B-4	F
C3035	B-8	F
C3050	B-5	C
C4001	C-2	C
C4002	C-7	F
C4003	C-2	C
C4004	B-8	F
C4005	C-1	C
C4006	B-2	C
C4007	B-2	C
C4008	C-2	C
C4009	B-2	C
C4012	C-1	C
C4014	D-1	C
C4015	D-1	C
C4016	C-1	C
C4017	D-8	F
C4019	C-2	C
C4020	C-8	F
C4021	B-2	C
C4022	B-2	C
C4023	B-2	C
C4024	B-2	C
C4025	B-8	F
C4026	B-7	F
C4027	B-8	F
C4028	B-8	F
C4029	C-8	F
C4030	B-8	F
C4031	B-8	F
C4032	C-8	F
C4033	B-8	F
C4034	B-8	F
C4035	B-8	F
C4036	B-7	F
C4037	D-9	C
C4038	B-3	C
C4045	B-8	F
C4046	B-8	F
C4801	C-1	C
C4803	C-1	C
C4804	C-1	C
C4805	C-1	C
C4806	C-1	C
C4807	B-2	C
C4808	B-1	C
C4809	C-1	C
C4816	B-1	C
C4817	B-2	C
C4818	B-1	C
C5001	A-4	C
C5002	A-4	C
C5003	A-4	C
C5004	A-4	C
C5005	A-4	C
C5006	A-4	C
C5007	A-4	C
C5008	A-4	C
C5009	A-4	C
C5010	A-4	C
C5011	A-4	C
C5012	B-5	F
C5013	B-6	F
C5014	B-6	F
C5016	B-6	F
C5017	B-4	C
C5018	B-5	F
C5019	B-4	C
C5020	B-4	C
C5021	B-5	C
C5022	A-5	C
C5023	B-4	C
C5024	B-6	F
C5025	B-5	F
C5041	B-6	F
C5501	B-7	F
C5503	A-8	F
C5504	B-7	F
C5505	B-7	F
C5506	B-7	F
C5507	C-3	C
C5508	B-3	C
C5509	B-3	C
C5510	B-7	F
C5511	B-3	C
C5512	B-3	C
C5513	B-7	F
C5514	B-7	F
C5515	B-7	F
C5516	B-7	F
C5517	C-7	F
C5518	B-7	F
C5519	B-7	F
C5520	B-7	F
C5521	C-3	C
C5522	C-6	F
C5523	A-2	C
C5524	B-4	C
C5525	B-3	C
C5526	B-3	C
C5527	B-7	F
C5530	B-8	F
C5531	A-8	F
C5534	B-7	F
C6001	C-4	F
C6002	E-4	C
C6003	E-9	C
C6004	E-8	C
C6005	E-9	C
C6006	E-9	C
C6007	E-8	C
C6010	C-6	C
C6011	C-4	F
C6012	C-4	F
C6014	C-4	F
C6015	E-8	C
C6016	C-3	F
C6017	C-4	F
C6018	F-4	F
C6019	D-6	C
C6020	C-4	F
C6021	E-4	F
C6022	E-5	F
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C6034	C-3	F
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C6202	C-2	C
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C6205	C-2	C
C6206	C-7	F
C6207	D-2	C
C6208	C-7	F
C6209	C-3	C

Resistor		
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R303	D-6	F
R304	C-6	F
R305	C-3	C
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R308	C-6	F
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R317	D-7	F
R318	E-6	F
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R329	C-4	C
R330	E-6	F
R331	D-4	C
R332	E-6	F
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R336	C-5	F
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R339	E-3	C
R340	C-6	F
R341	D-4	C
R343	D-4	C
R344	C-4	C
R345	C-4	C
R346	C-4	F
R347	C-7	F
R358	D-7	F
R359	C-6	F
R360	E-4	C
R361	E-4	C
R363	F-6	F
R364	E-6	F
R365	E-6	F
R370	D-7	F
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R376	C-6	F
R377	D-8	F
R379	D-7	F
R380	D-7	F
R381	D-7	F
R382	D-7	F
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R388	C-4	C
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R396	E-3	C
R400	C-6	F
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R704	D-8	F
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R709	D-2	C
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R718	E-7	F
R722	D-8	F
R723	E-7	F
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R737	E-7	F
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R743	E-7	F
R745	D-7	F
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R1604	C-1	F
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R2010	F-2	C
R2012	F-2	C
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R3002	B-5	F
R3003	B-4	F
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R3011	B-5	C
R3012	B-5	C
R3013	B-5	C
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R3016	C-7	F
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R6111	C-5	C
R6112	C-5	C
R6113	D-4	F
R6114	D-5	F
R6115	E-4	F
R6116	D-4	F
R6117	D-5	F
R6118	E-5	F
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R6120	D-5	F
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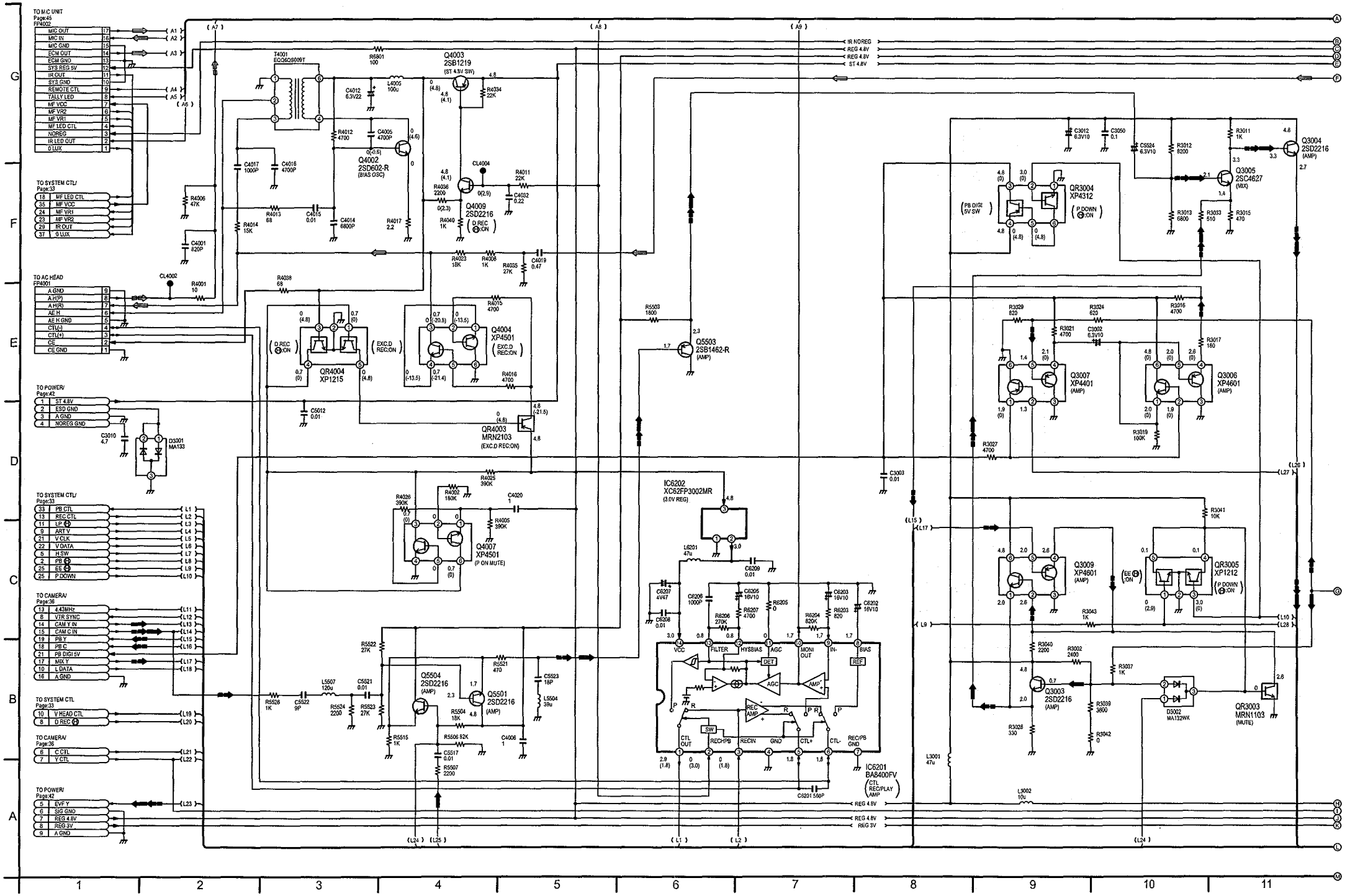
R6122	D-5	F
R6123	C-3	F
R6124


TO MIC UNIT
Page:45
FP4002
MIC OUT
MIC IN
MIC GND
ECM OUT
ECM GND
SYS REG 5V
IR OUT
SYS GND
REMOTE CTL
TALLY LED
MF VCC
MF VR2
MF VR1
MF LED CTL
NOREG
IR LED OUT
D LUX
TO SYSTEM CTL/
Page:33
MF LED CTL
MF VCC
MF VR1
MF VR2
IR OUT
D LUX
TO AC HEAD
FP4001
A GND
A H(P)
A H(R)
AE H
AE H GND
CTL(-)
CTL(+)
CE
CE GND
TO POWER/
Page:42
ST 4.8V
ESD GND
A GND
NOREG GND
TO SYSTEM CTL/
Page:33
PB CTL
REC CTL
LP
ART V
V CLK
V OATA
H SW
PB
EE
P DOWN
TO CAMERA/
Page:36
4.43MHz
VTR SYNC
CAM Y IN
CAM C IN
PB Y
PB C
PB DIGI 5V
MIX Y
L DATA
A GND
TO SYSTEM CTL
Page:33
V HEAD CTL
D REC
TO CAMERA/
Page:36
C CTL
Y CTL
TO POWER/
Page:42
EVF Y
SIG GND
REG 4.8V
REG 3V
A GND
T4001
EQQ6QS009T
Q4003
2SB1219
(ST 4.8V SW)
Q4002
2SD602-R
(BIAS OSC)
Q4009
2SD2216
(D REC ON)
QR4004
XP1215
Q4004
XP4501
(EXC.D REC:ON)
QR4003
MRN2103
(EXC.D REC:ON)
D3001
MA133
Q4007
XP4501
(P ON MUTE)
Q5504
2SD2216
(AMP)
Q5501
2SD2216
(AMP)
Q5503
2SB1462-R
(AMP)
IC6202
XC62FP3002MR
(3.0V REG)
IC6201
BA8400FV
(CTL REC/PLAY AMP)
QR3004
XP4312
(P DOWN ON:ON)
Q3004
2SD2216
(AMP)
Q3005
2SC4627
(MIX)
Q3007
XP4401
(AMP)
Q3006
XP4601
(AMP)
Q3009
XP4601
(AMP)
QR3005
XP1212
(P DOWN ON:ON)
Q3003
2SD2216
(AMP)
QR3003
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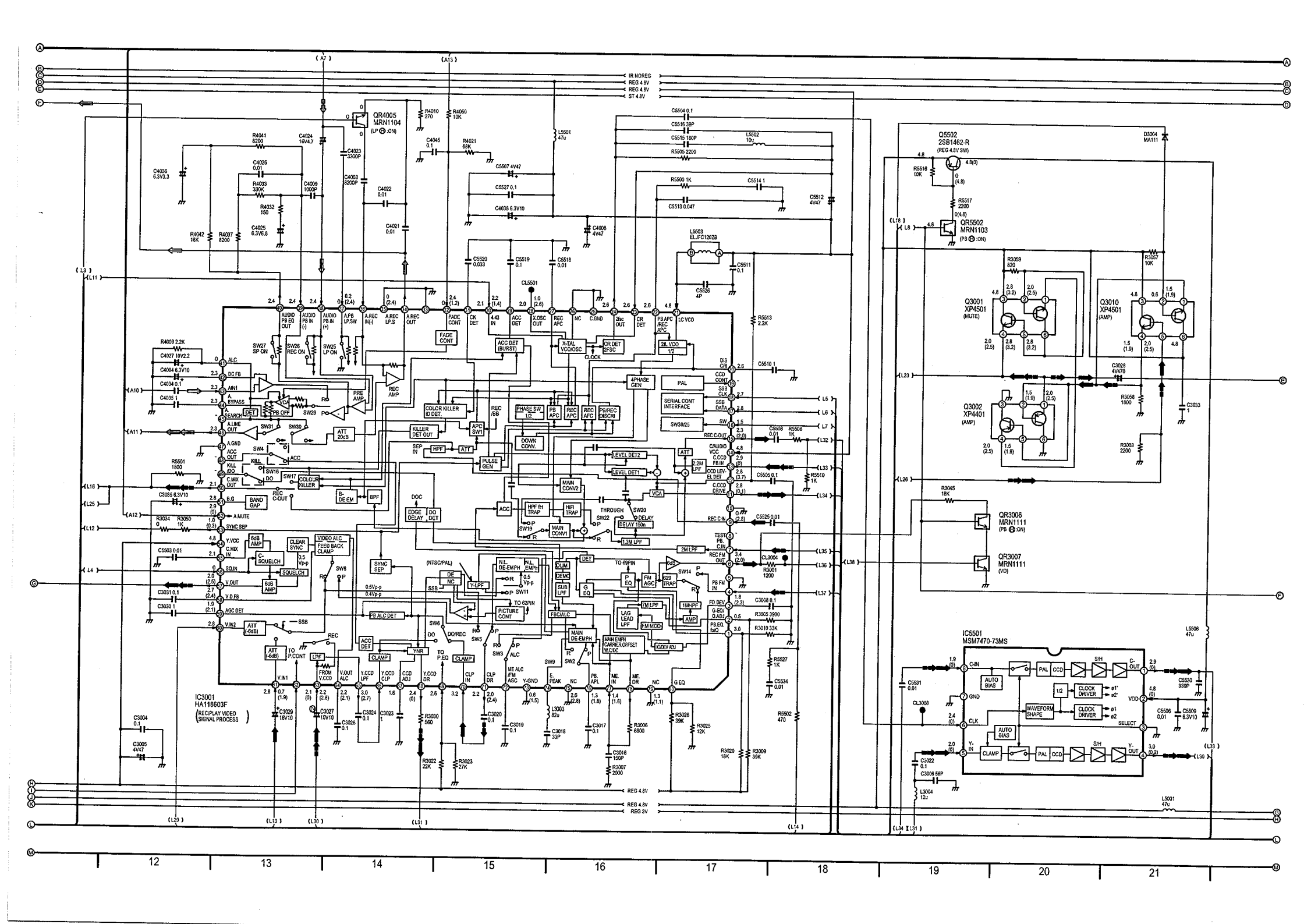
(MUTE)
D3002
MA132WK
IR NOREG
REG 4.8V
REG 4.8V
ST 4.8V
REG 4.8V
REG 3V


IC3001
HA116603F
(REC/PLAY VIDEO SIGNAL PROCESS)
IC5501
MSM7470-73MS
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(REG 4.8V SW)
Q3001
XP4501
(MUTE)
Q3010
XP4501
(AMP)
Q3002
XP4401
(AMP)
QR4005
MRN1104
QR5502
MRN1103
QR3006
MRN1111
QR3007
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CL3004
CL3008
L5503
ELJFC1202B
L5501 47u
L5502 10u
L5506 47u
L5001 47u
L3003 82u
L3004 12u
IR NOREG
REG 4.8V
REG 4.8V
ST 4.8V
REG 4.8V
REG 3V
REC/PLAY VIDEO SIGNAL PROCESS
AUDIO PB EQ OUT
AUDIO PB IN (-)
AUDIO PB IN (+)
A.PB LP.SW
A.REC IN(-)
A.REC LP.S
A.REC OUT
FADE CONT
CK DET
4.43 IN
ACC DET
X-OSC OUT
REC APC
NC
C.GND
2fsc OUT
CR DET
PB APC /REC APC
LC VCO
DIS CH
CCD CONT
SSB CLK
SSB DATA
SW
REC C-OUT
C/AUDIO VCC
C.CCD FB.IN
CCD LEV. EL DET
C.CCD DRIVE
REC C IN
TEST PB. CIN
REC FM OUT
PB FM IN
FO. DEV
G-EQ/ Q.ADJ
PB.EQ. fwQ
ALC
AGC DET
V.IN2
V.D.FB
V.OUT
SQ.IN
C.MIX IN
Y.VCC
A.MUTE
SYNC SEP
B.G
A.GND
ACC OUT
KILL I/O
C.MIX OUT
A.LINE OUT
A. BYPASS
AIN1
DC FB
ALC
SW27 SP ON
SW26 REC ON
SW25 LP ON
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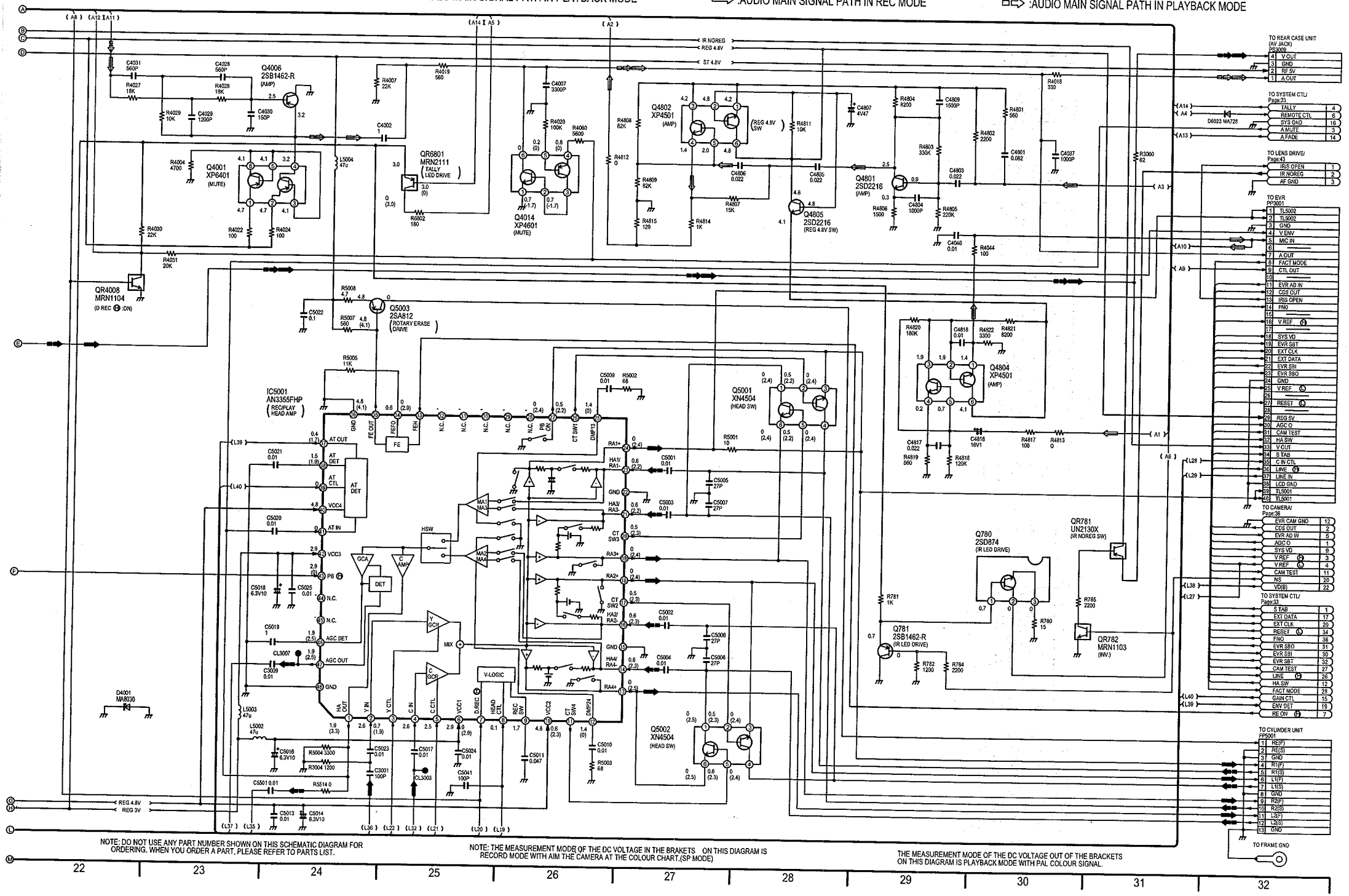
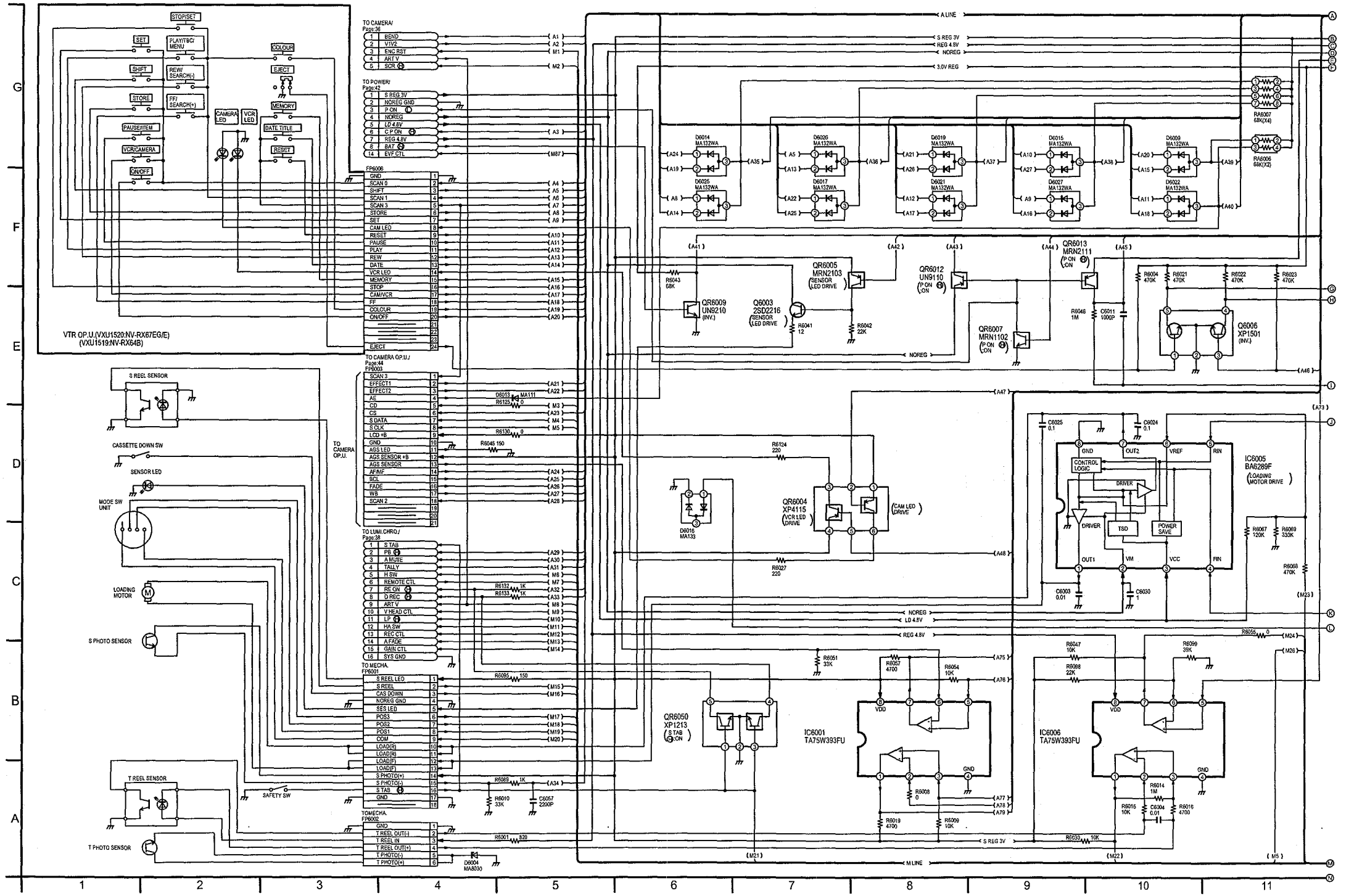
:VIDEO MAIN SIGNAL PATH IN REC MODE

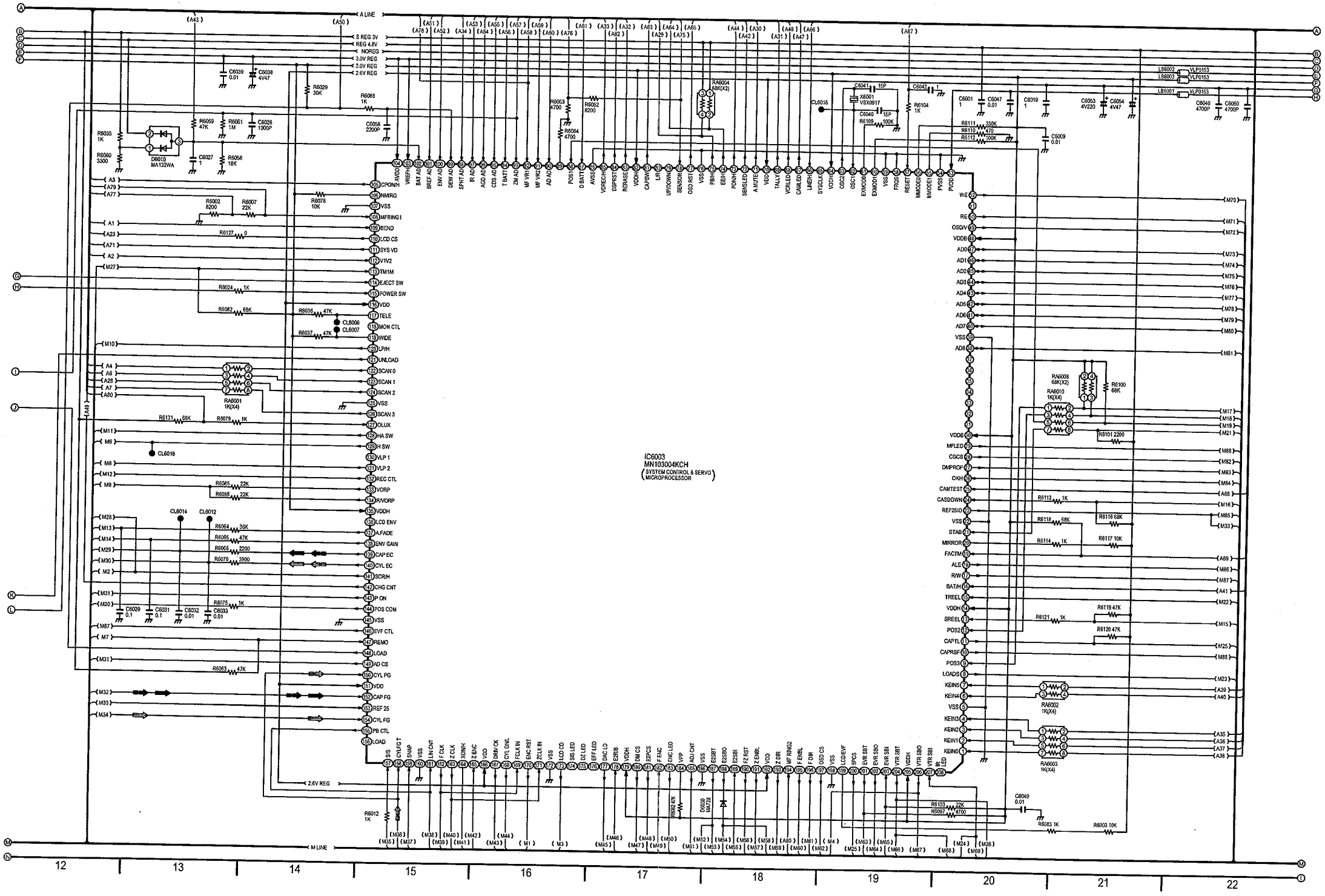
:VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

:AUDIO MAIN SIGNAL PATH IN REC MODE

:AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


IC5001 AN3355FHP (REC/PLAY HEAD AMP)
Q5001 XN4504 (HEAD SW)
Q5002 XN4504 (HEAD SW)
Q4001 XP6401 (MUTE)
Q4006 2SB1462-R (AMP)
Q4014 XP4601 (MUTE)
Q4802 XP4501 (AMP)
Q4801 2SD2216 (AMP)
Q4805 2SD2216 (REG 4.8V SW)
Q4804 XP4501 (AMP)
QR6801 MRN2111 (TALLY / LED DRIVE)
QR4008 MRN1104 (D REC :ON)
Q5003 2SA812 (ROTARY ERASE DRIVE)
Q780 2SD874 (IR LED DRIVE)
Q781 2SB1462-R (IR LED DRIVE)
QR781 UN2130X (IR NOREG SW)
QR782 MRN1103 (INV.)
D4001 MA8030
D6023 MA728
IR NOREG
REG 4.8V
ST 4.8V
REG 3V
TO REAR CASE UNIT (AV JACK) PP3009
TO SYSTEM CTL/ Page:33
TO LENS DRIVE/ Page:43
TO EVR PP3001
TO CAMERA/ Page:38
TO SYSTEM CTL/ Page:3
TO CYLINDER UNIT FP5001
TO FRAME GND
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRAKETS ON THIS DIAGRAM IS RECORD MODE WITH AIM THE CAMERA AT THE COLOUR CHART.(SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.


VTR OP.U.(VXU1520:NV-RX67EG/E)
(VXU1519:NV-RX64B)
STOP/SET
SET
PLAY/TBC/MENU
SHIFT
REW/SEARCH(-)
STORE
FF/SEARCH(+)
PAUSE/ITEM
VCR/CAMERA
ON/OFF
CAMERA LED
VCR LED
COLOUR
EJECT
MEMORY
DATE TITLE
RESET
TO CAMERA/
TO POWER/
FP6006
TO CAMERA OP.U./
FP6003
TO LUMI.CHRO./
TO MECHA.
FP6001
TOMECHA.
FP6002
A LINE
M LINE
S REG 3V
REG 4.8V
NOREG
3.0V REG
LD 4.8V
QR6009 UN9210 (INV.)
Q6003 2SD2216 (SENSOR LED DRIVE)
QR6005 MRN2103 (SENSOR LED DRIVE)
QR6012 UN9110 (P ON ON)
QR6013 MRN2111 (P ON ON)
QR6007 MRN1102 (P ON ON)
Q6006 XP1501 (INV.)
QR6004 XP4115 (VCR LED DRIVE)
(CAM LED DRIVE)
QR6050 XP1213 (S TAB ON)
IC6001 TA75W393FU
IC6006 TA75W393FU
IC6005 BA6289F (LOADING MOTOR DRIVE)
CONTROL LOGIC
DRIVER
TSD
POWER SAVE
S REEL SENSOR
CASSETTE DOWN SW
SENSOR LED
MODE SW UNIT
LOADING MOTOR
S PHOTO SENSOR
T REEL SENSOR
SAFETY SW
T PHOTO SENSOR


IC6003
MN103004KCH
(SYSTEM CONTROL & SERVO)
MICROPROCESSOR
A LINE
M LINE
S REG 3V
REG 4.8V
NOREG
3.0V REG
3.0V REG
2.6V REG
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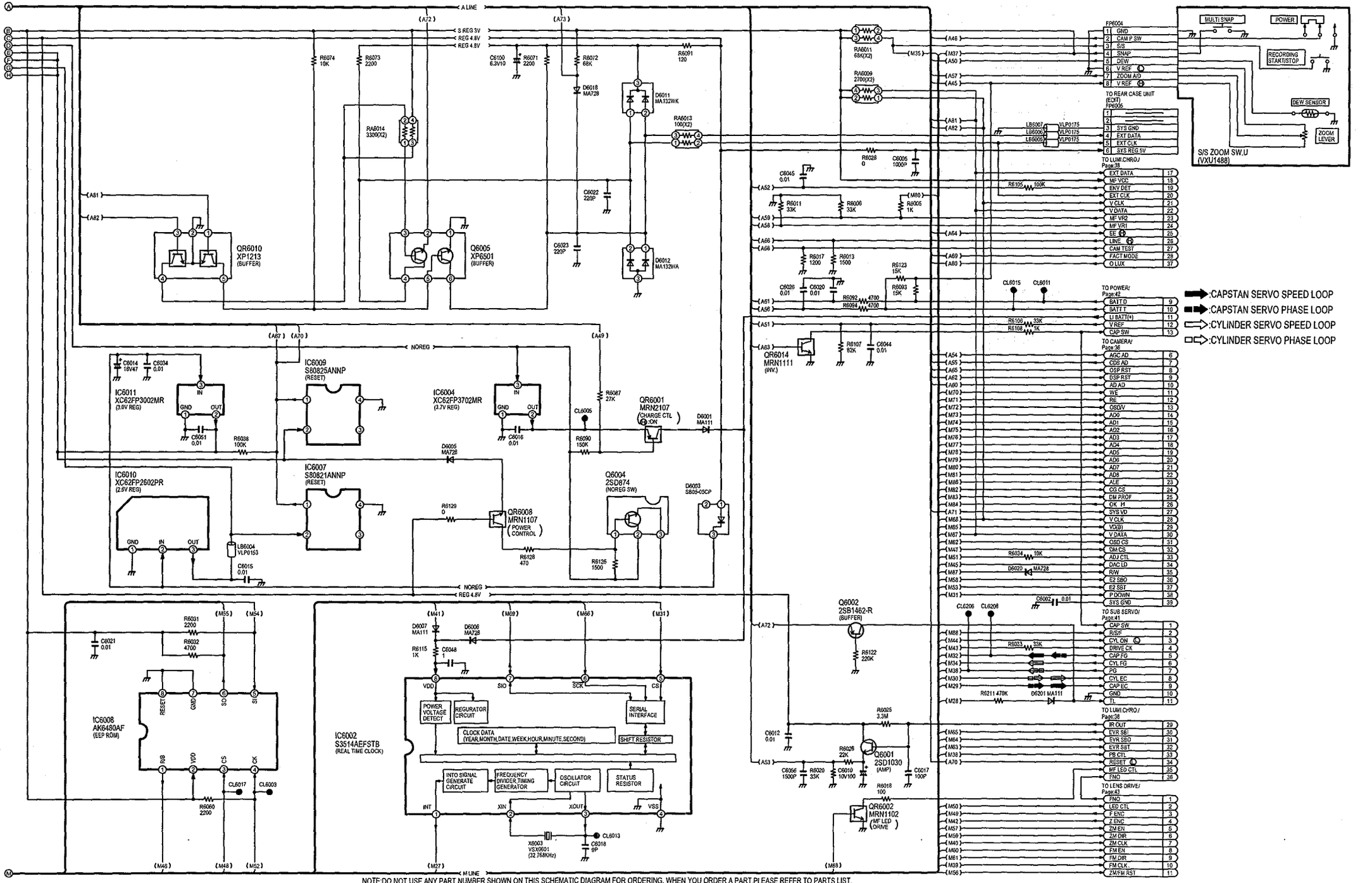
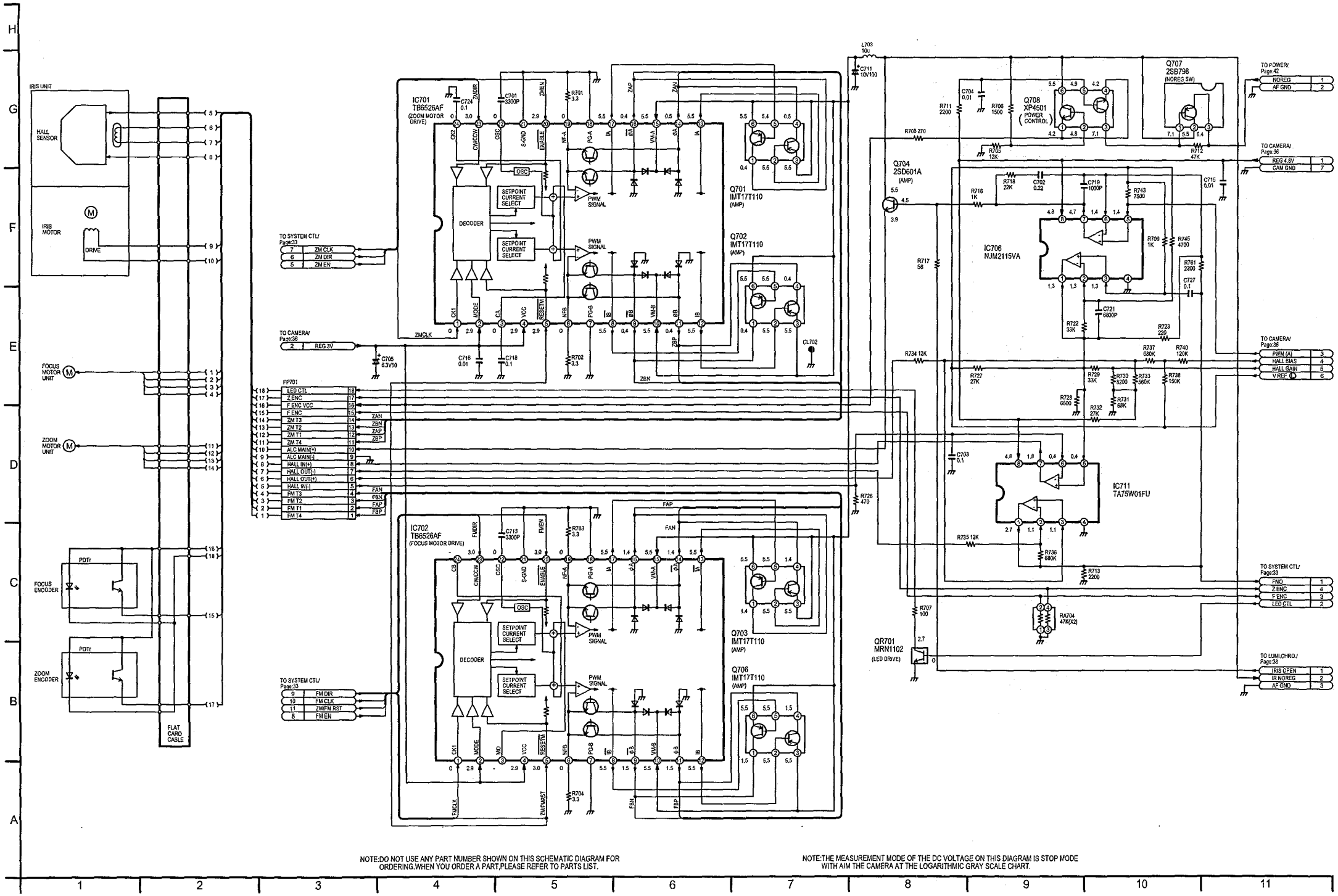
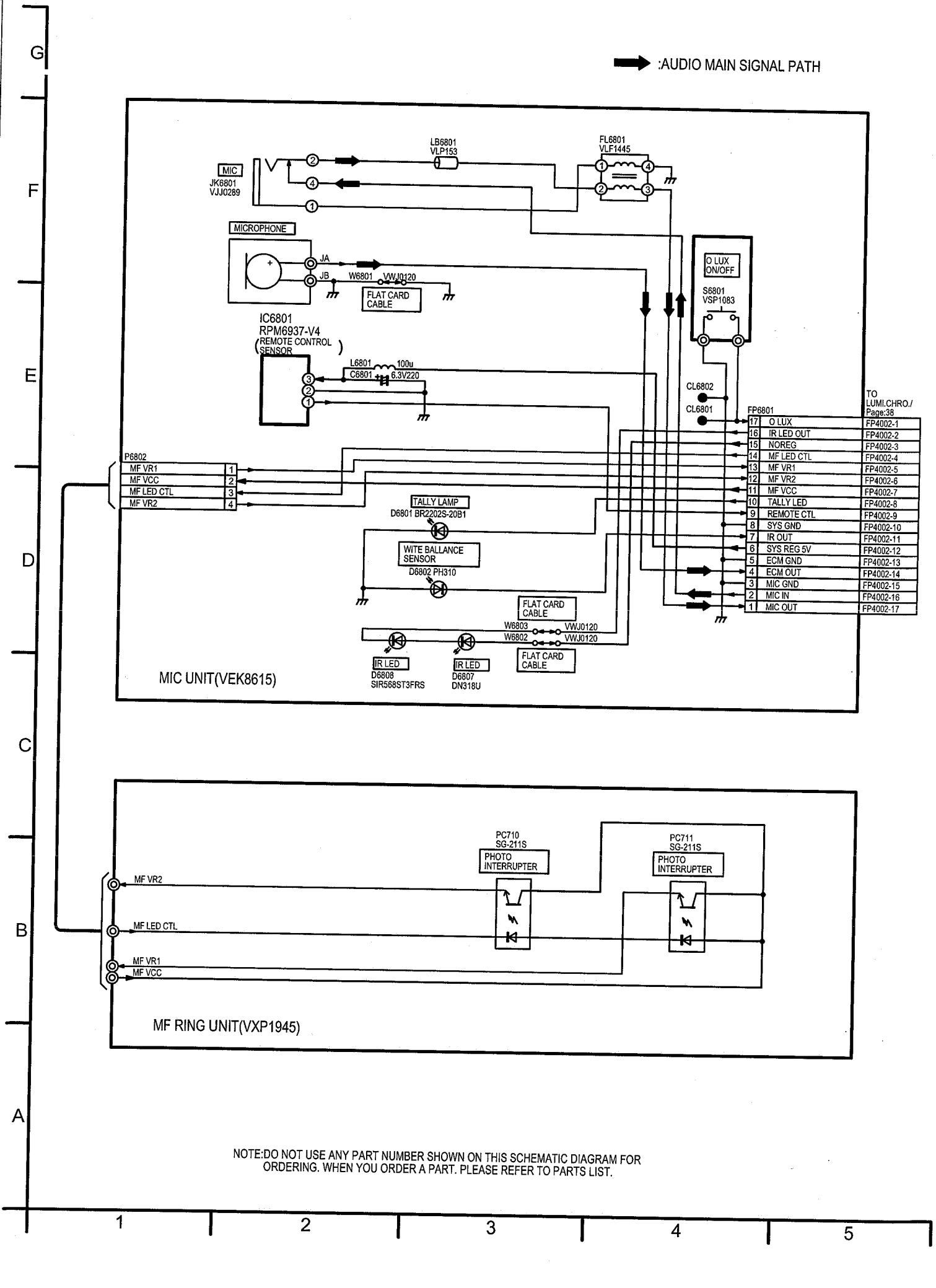


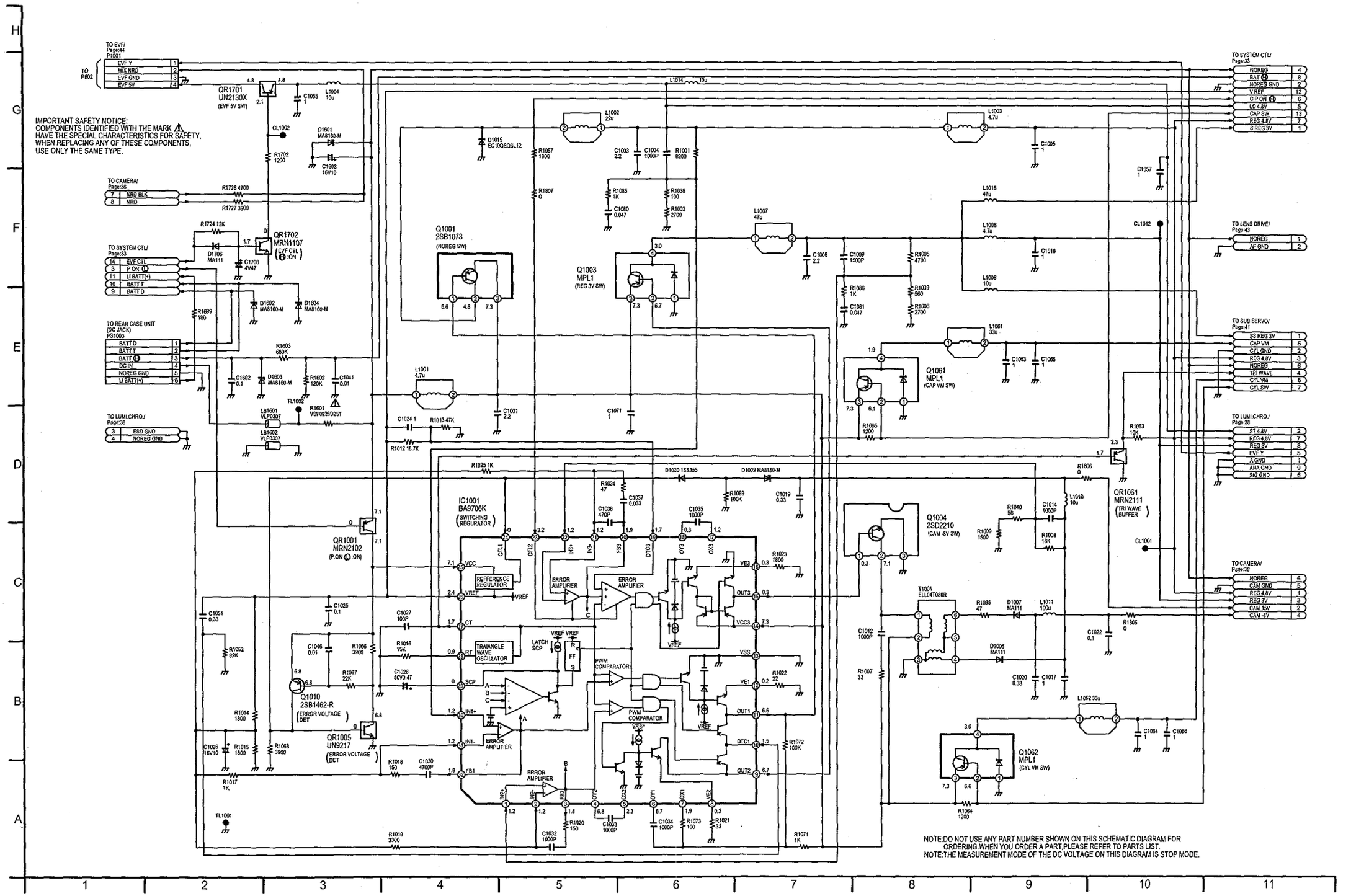
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

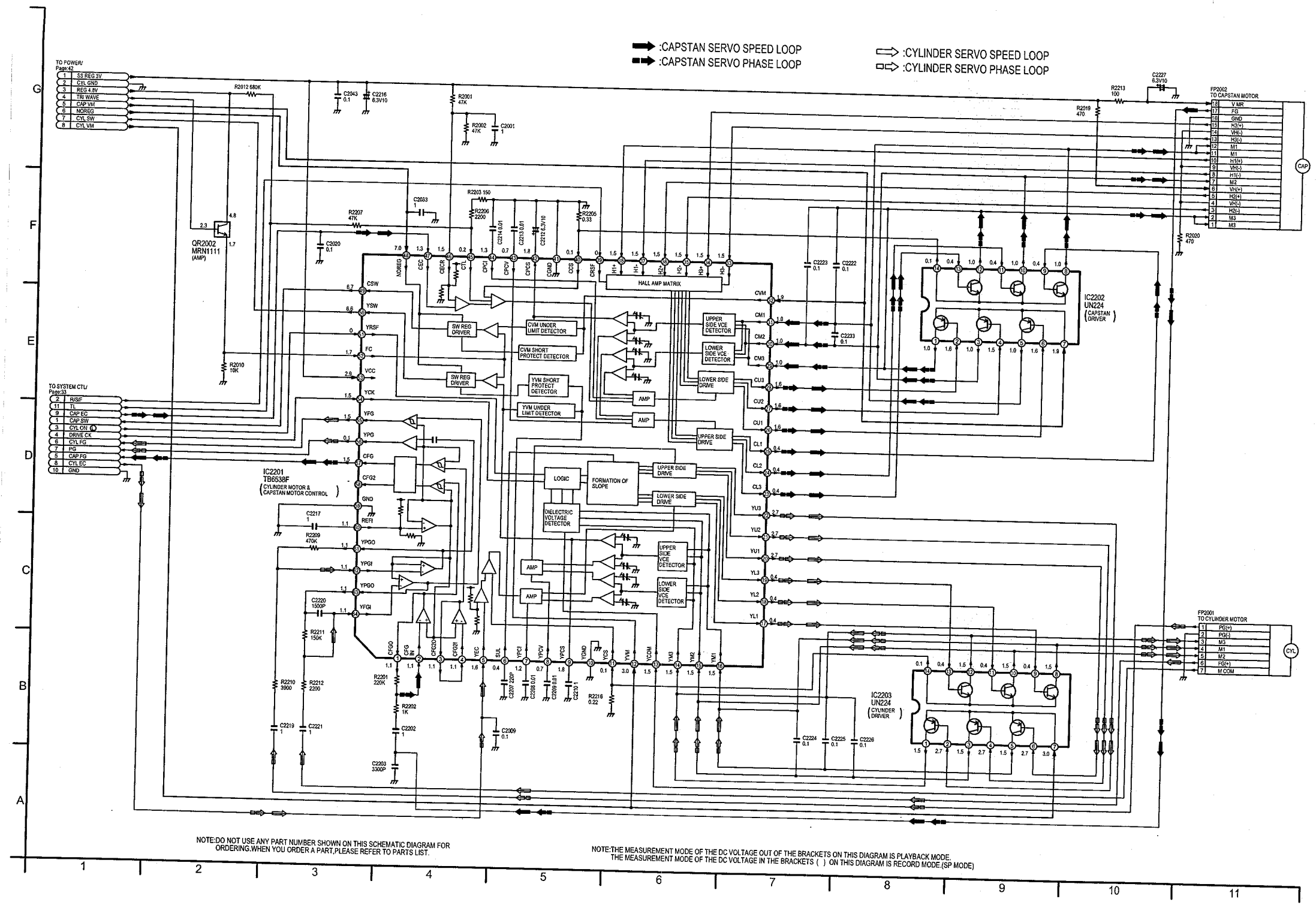
23 24 25 26 27 28 29 30 31 32 33

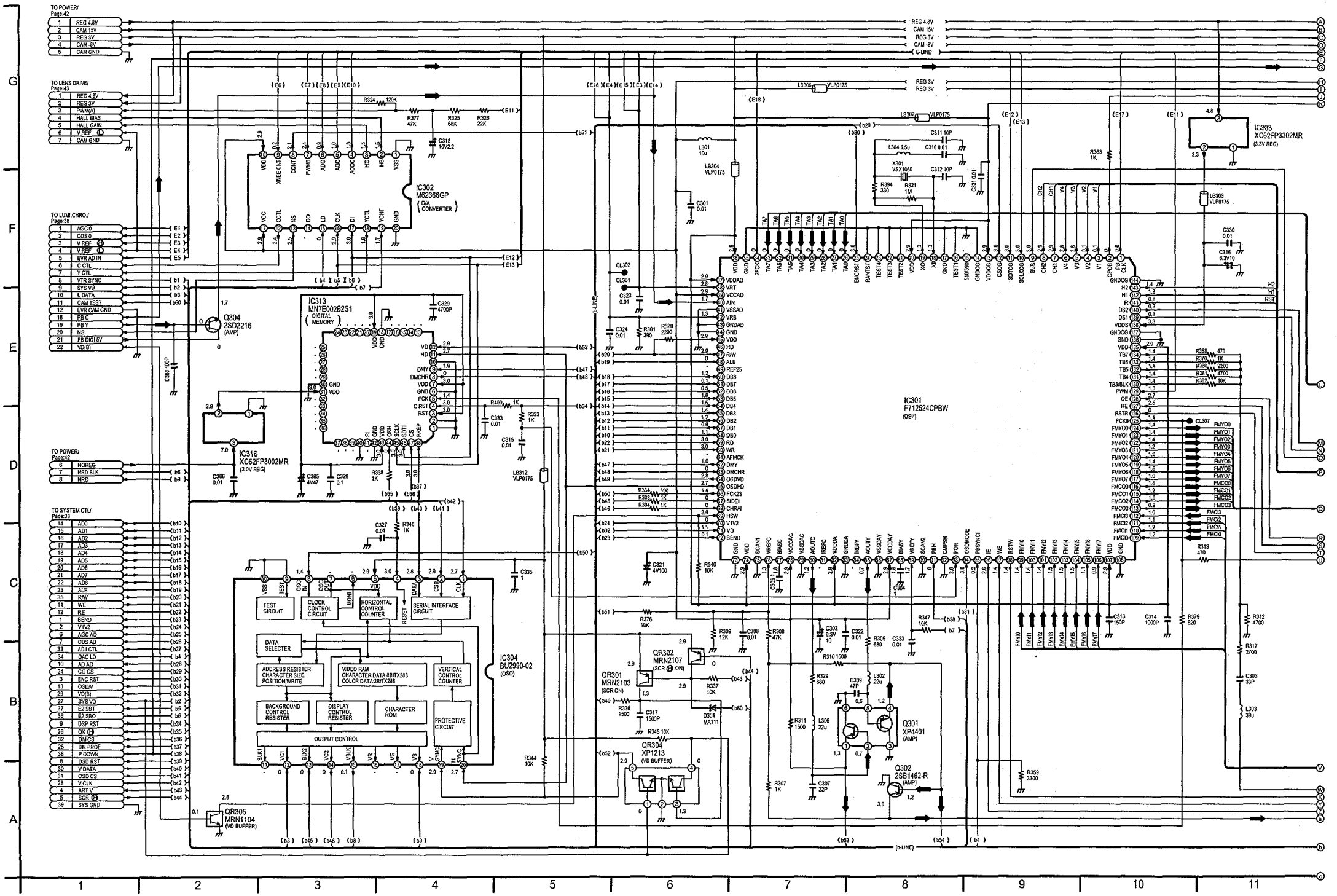

IRIS UNIT
HALL SENSOR
IRIS MOTOR
DRIVE
FOCUS MOTOR UNIT
ZOOM MOTOR UNIT
FOCUS ENCODER
ZOOM ENCODER
PDTr
FLAT CARD CABLE
IC701 TB6526AF (ZOOM MOTOR DRIVE)
IC702 TB6526AF (FOCUS MOTOR DRIVE)
DECODER
OSC
SETPOINT CURRENT SELECT
PWM SIGNAL
Q701 IMT17T110 (AMP)
Q702 IMT17T110 (AMP)
Q703 IMT17T110 (AMP)
Q706 IMT17T110 (AMP)
Q704 2SD601A (AMP)
Q707 2SB798 (NOREG SW)
Q708 XP4501 (POWER CONTROL)
IC706 NJM2115VA
IC711 TA75W01FU
QR701 MRN1102 (LED DRIVE)
RA704 47K(X2)
FP701
TO SYSTEM CTL/ Page:33
TO CAMERA/ Page:36
TO POWER/ Page:42
TO LUMI.CHRO./ Page:38
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE WITH AIM THE CAMERA AT THE LOGARITHMIC GRAY SCALE CHART.

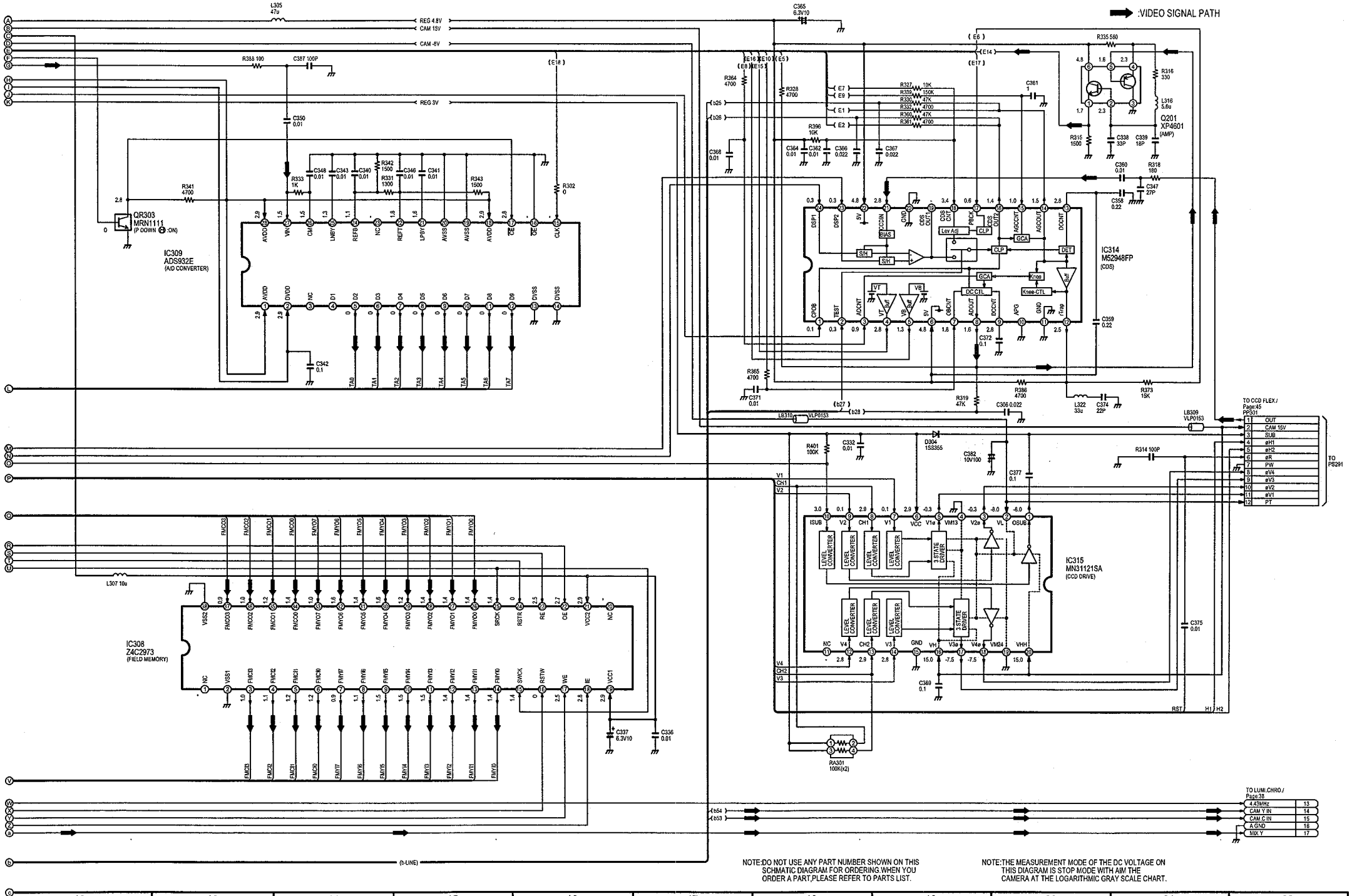


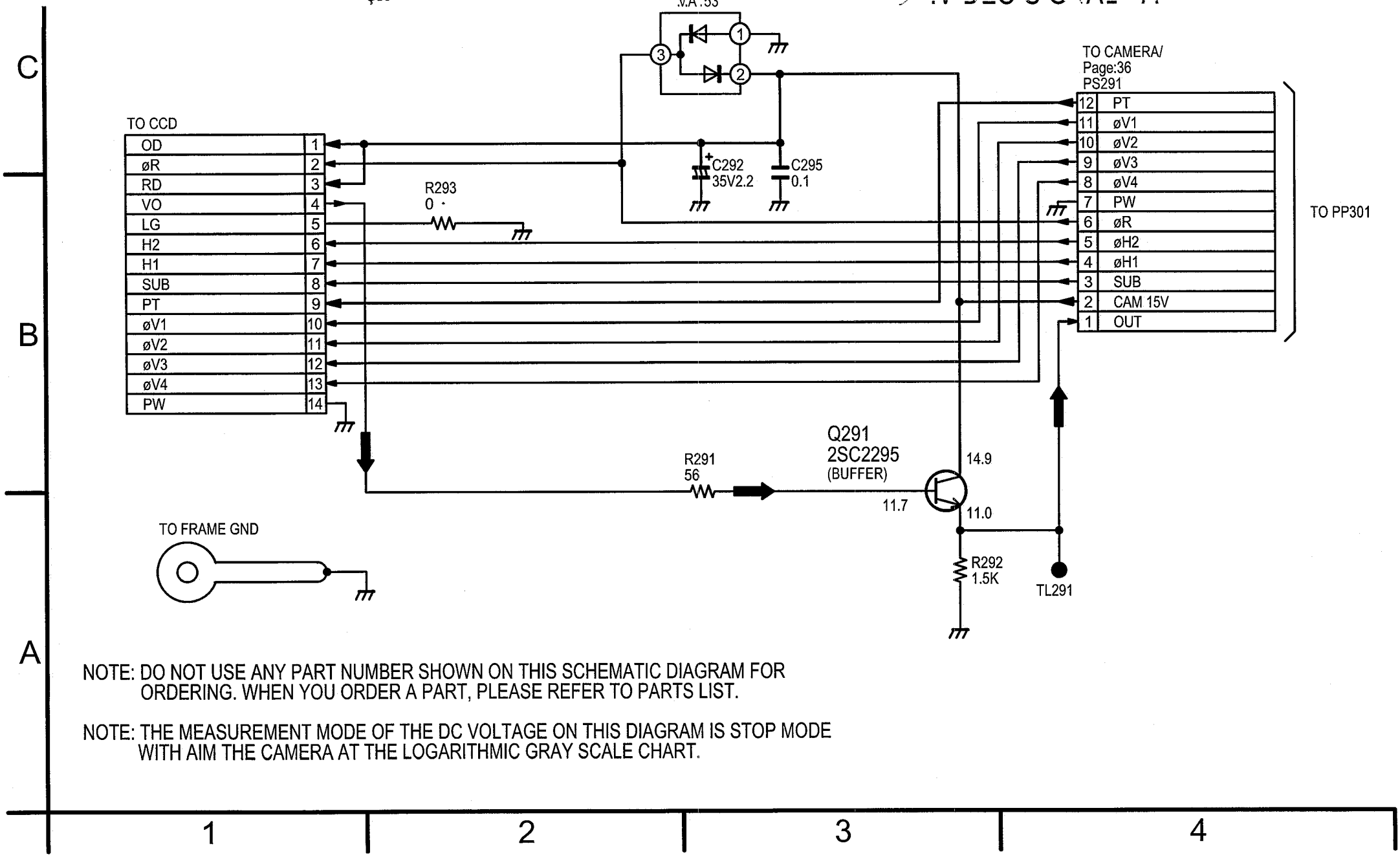
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART. PLEASE REFER TO PARTS LIST.


IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠
HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SAME TYPE.
IC1001
BA9706K
(SWITCHING REGURATOR)
Q1001
2SB1073
(NOREG SW)
Q1003
MPL1
(REG 3V SW)
Q1061
MPL1
(CAP VM SW)
Q1004
2SD2210
(CAM -8V SW)
Q1062
MPL1
(CYL VM SW)
QR1001
MRN2102
(P.ON :ON)
QR1005
UN9217
(ERROR VOLTAGE DET)
Q1010
2SB1462-R
(ERROR VOLTAGE DET)
QR1061
MRN2111
(TRI WAVE BUFFER)
QR1701
UN2130X
(EVF 5V SW)
QR1702
MRN1107
(EVF CTL :ON)
REFFERENCE REGULATOR
TRIANGLE WAVE OSCILLATOR
ERROR AMPLIFIER
PWM COMPARATOR
LATCH SCP
TO EVF/ Page:44 P1001
TO P802
TO CAMERA/ Page:36
TO SYSTEM CTL/ Page:33
TO REAR CASE UNIT (DC JACK) PS1003
TO LUMI.CHRO./ Page:38
TO SUB SERVO/ Page:41
TO LENS DRIVE/ Page:43
TO CAMERA/ Page:38
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.


:CAPSTAN SERVO SPEED LOOP
:CAPSTAN SERVO PHASE LOOP
:CYLINDER SERVO SPEED LOOP
:CYLINDER SERVO PHASE LOOP
TO POWER/ Page:42
SS REG 3V
CYL GND
REG 4.8V
TRI WAVE
CAP VM
NOREG
CYL SW
CYL VM
QR2002 MRN1111 (AMP)
TO SYSTEM CTL/ Page:33
R/S/F
TL
CAP EC
CAP SW
CYL ON
DRIVE CK
CYL FG
PG
CAP FG
CYL EC
GND
IC2201 TB6538F (CYLINDER MOTOR & CAPSTAN MOTOR CONTROL)
HALL AMP MATRIX
SW REG DRIVER
CVM UNDER LIMIT DETECTOR
CVM SHORT PROTECT DETECTOR
YVM SHORT PROTECT DETECTOR
YVM UNDER LIMIT DETECTOR
AMP
LOGIC
FORMATION OF SLOPE
DIELECTRIC VOLTAGE DETECTOR
UPPER SIDE VCE DETECTOR
LOWER SIDE VCE DETECTOR
UPPER SIDE DRIVE
LOWER SIDE DRIVE
IC2202 UN224 (CAPSTAN DRIVER)
IC2203 UN224 (CYLINDER DRIVER)
FP2002 TO CAPSTAN MOTOR
V MR
FG
GND
H3(+)
VH(-)
H3(-)
M1
M1
H1(+)
VH(-)
H1(-)
M2
VH(+)
H2(+)
VH(-)
H2(-)
M3
M3
CAP
FP2001 TO CYLINDER MOTOR
PG(+)
PG(-)
M3
M1
M2
FG(+)
M COM
CYL
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE.(SP MODE)

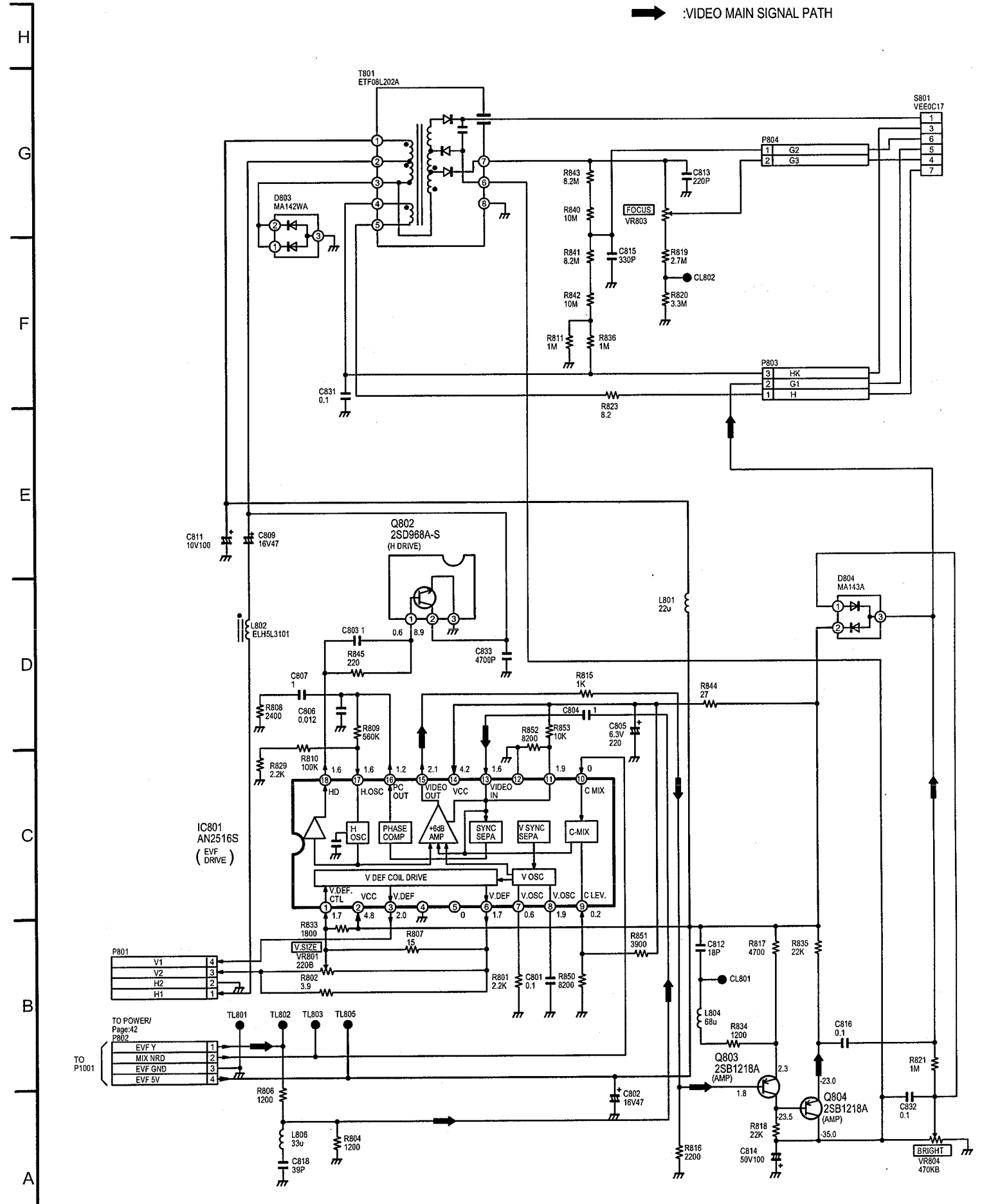

TO POWER/ Page:42
REG 4.8V
CAM 15V
REG 3V
CAM -8V
CAM GND
TO LENS DRIVE/ Page:43
REG 4.8V
REG 3V
PWM(A)
HALL BIAS
HALL GAIN
V REF
CAM GND
TO LUMI.CHRO./ Page:38
AGC O
CDS O
V REF
EVR AD IN
C CTL
Y CTL
VTR SYNC
SYS VD
L DATA
CAM TEST
EVR CAM GND
PB C
PB Y
NS
PB DIGI 5V
VD(B)
TO POWER/ Page:42
NOREG
NRD BLK
NRD
TO SYSTEM CTL/ Page:33
AD0
AD1
AD2
AD3
AD4
AD5
AD6
AD7
AD8
ALE
RW
WE
RE
BEND
V1V2
AGC AD
CDS AD
ADJ CTL
DAC LD
AD AD
CG CS
ENC RST
OSD/V
VD(B)
SYS VD
E2 SBT
E2 SBO
DSP RST
OK
DM CS
DM PROF
P DOWN
OSD RST
V DATA
OSD CS
V CLK
ART V
SCR
SYS GND
IC302 M62366GP (D/A CONVERTER)
IC313 MN7E002B2S1 (DIGITAL MEMORY)
IC316 XC62FP3002MR (3.0V REG)
IC303 XC62FP3302MR (3.3V REG)
IC301 F712524CPBW (DSP)
IC304 BU2990-02 (OSD)
Q304 2SD2216 (AMP)
Q301 XP4401 (AMP)
Q302 2SB1462-R (AMP)
QR301 MRN2103 (SCR ON)
QR302 MRN2107 (SCR ON)
QR303 XP1213 (VD BUFFER)
QR305 MRN1104 (VD BUFFER)
D301 MA111
X301 VSX1050
TEST CIRCUIT
CLOCK CONTROL CIRCUIT
HORIZONTAL CONTROL COUNTER
SERIAL INTERFACE CIRCUIT
DATA SELECTER
ADDRESS RESISTER CHARACTER SIZE, POSITION,WRITE
VIDEO RAM CHARACTER DATA:8BITX288 COLOR DATA:3BITX288
VERTICAL CONTROL COUNTER
BACKGROUND CONTROL RESISTER
DISPLAY CONTROL RESISTER
CHARACTER ROM
PROTECTIVE CIRCUIT
OUTPUT CONTROL
REG 4.8V
CAM 15V
REG 3V
CAM -8V
G-LINE
REG 3V
REG 3V
VLP0175
(b-LINE)


:VIDEO SIGNAL PATH
IC309
ADS932E
(A/D CONVERTER)
QR303
MRN1111
(P DOWN ⊖ :ON)
IC314
M52948FP
(CDS)
Q201
XP4601
(AMP)
IC315
MN31121SA
(CCD DRIVE)
IC308
Z4C2973
(FIELD MEMORY)
TO CCD FLEX./ Page:45 PP301
TO PS291
TO LUMI.CHRO./ Page:38
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE WITH AIM THE CAMERA AT THE LOGARITHMIC GRAY SCALE CHART.

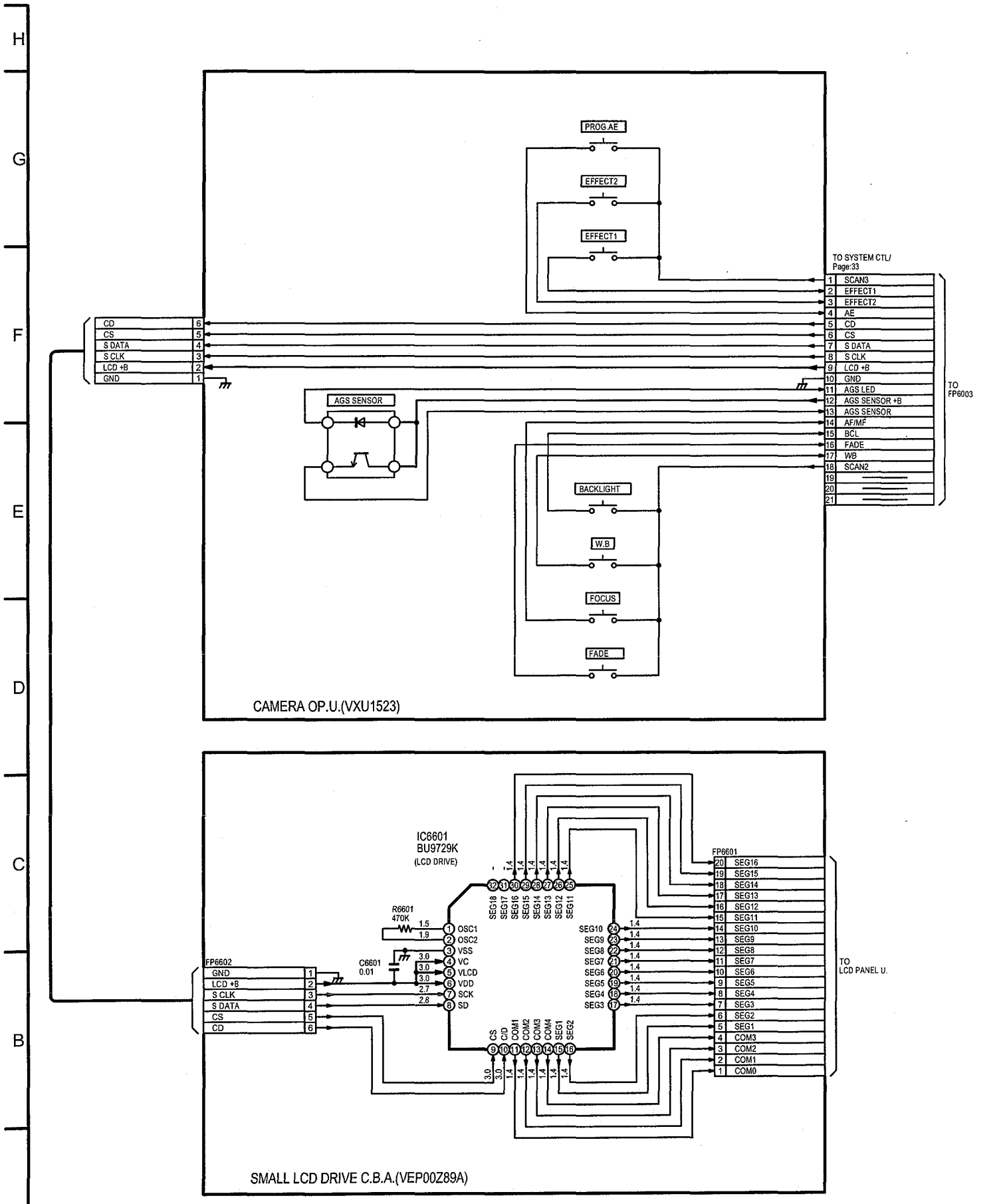


NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE WITH AIM THE CAMERA AT THE LOGARITHMIC GRAY SCALE CHART.



NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.



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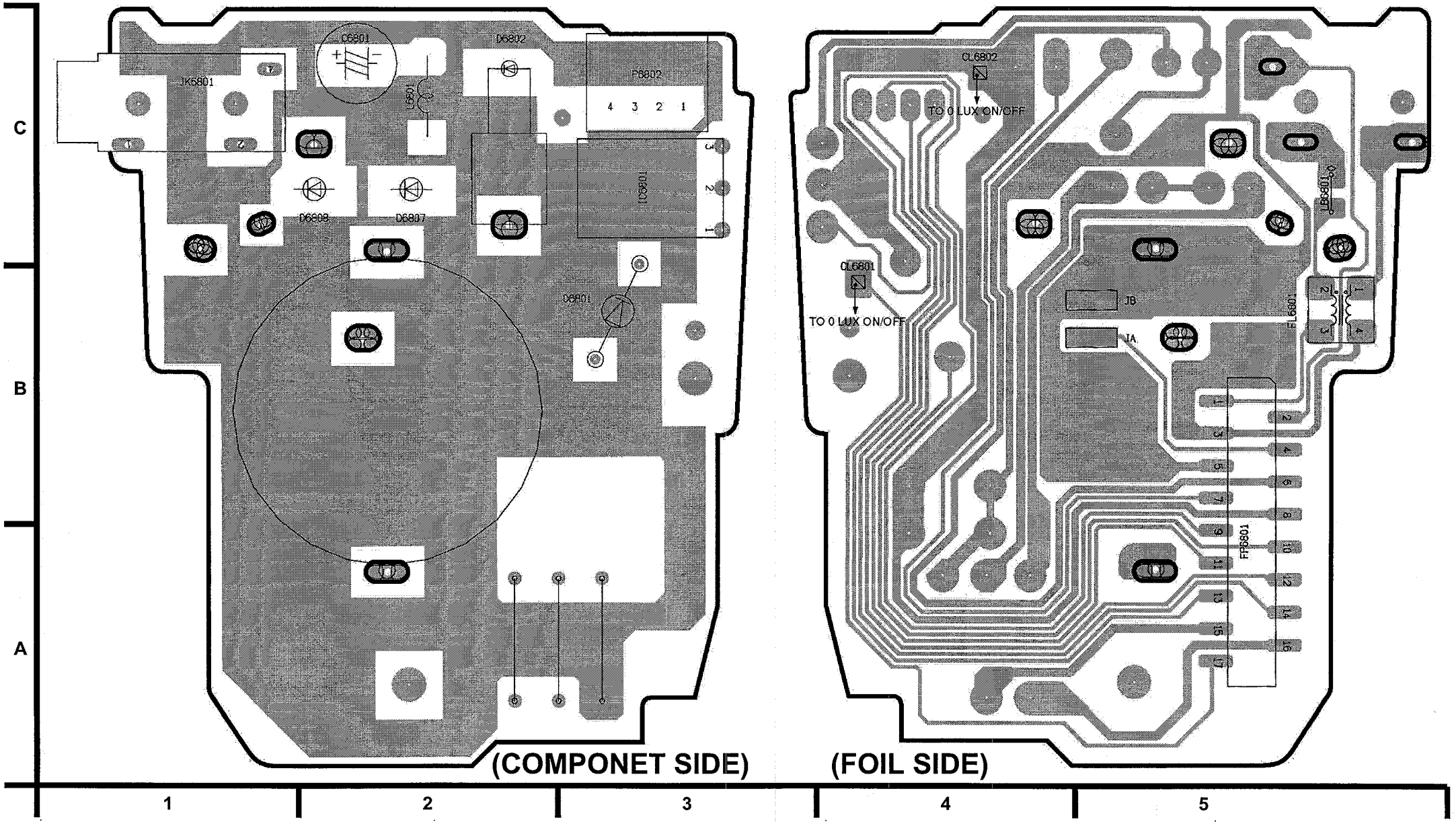
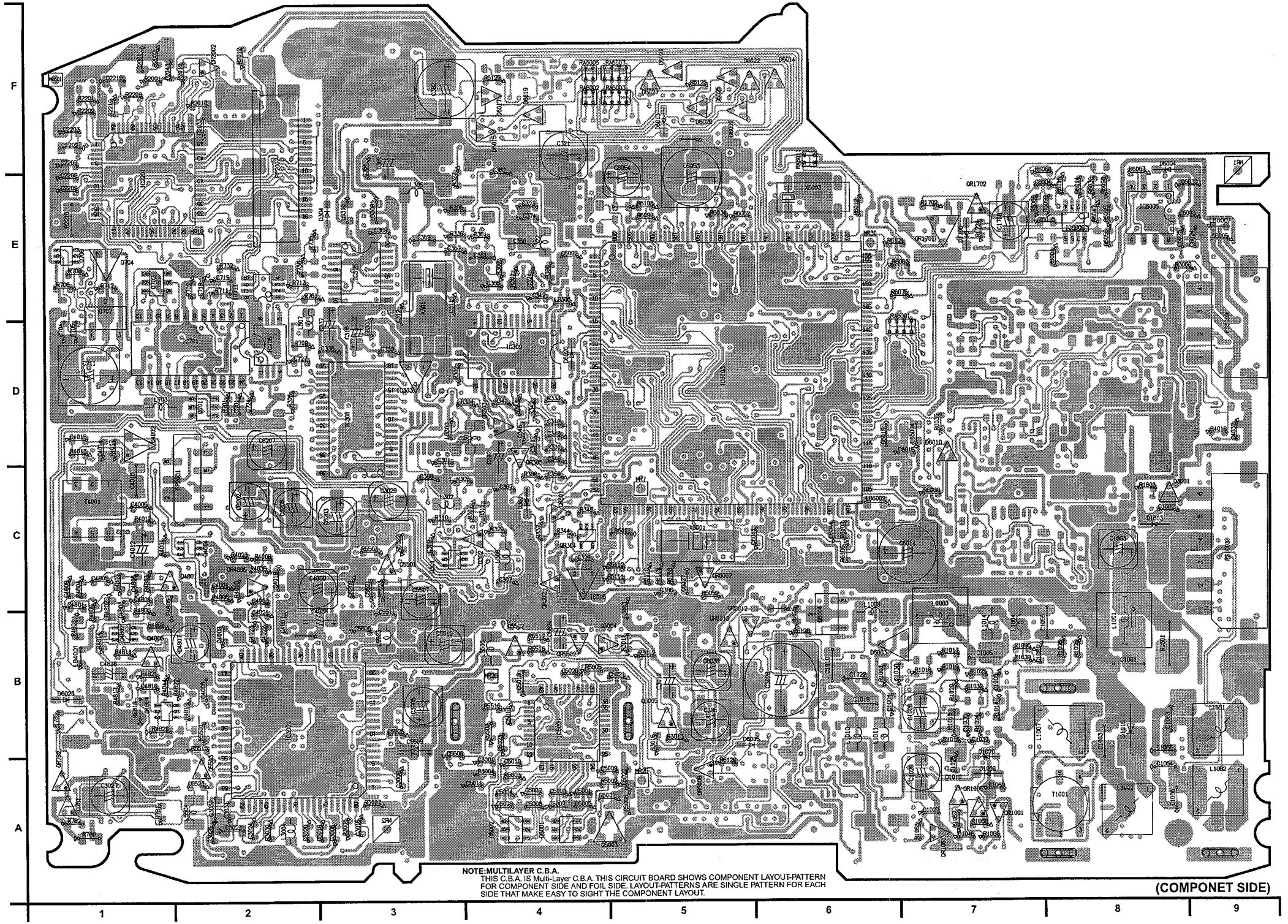
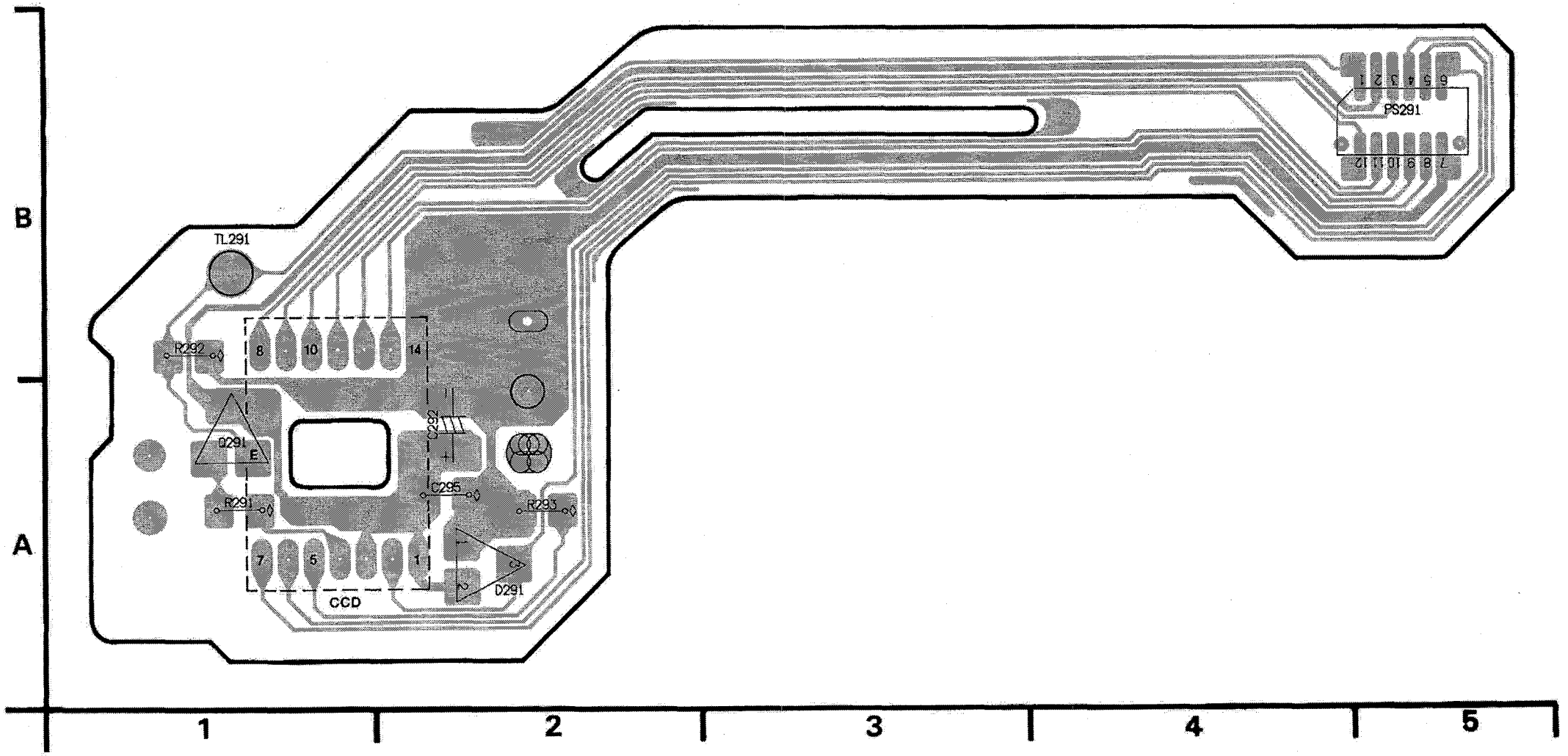
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

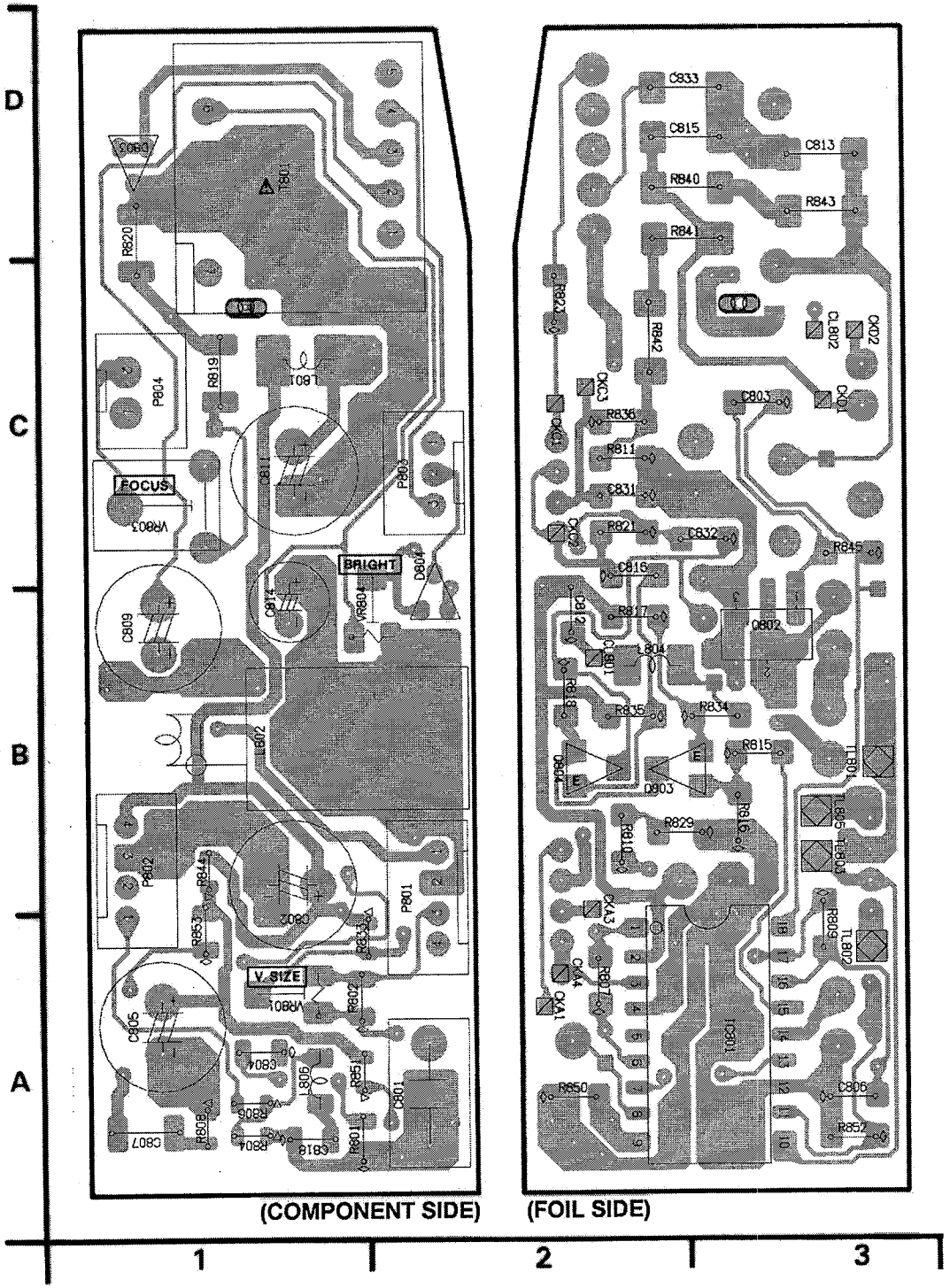

C
B
A
1
2
3
4
5
C6801
D6802
P6802
4 3 2 1
IK6801
D6808
D6807
D6801
CL6802
TO 0 LUX ON/OFF
CL6801
TO 0 LUX ON/OFF
JB
JA
FPC6801
(COMPONET SIDE)
(FOIL SIDE)

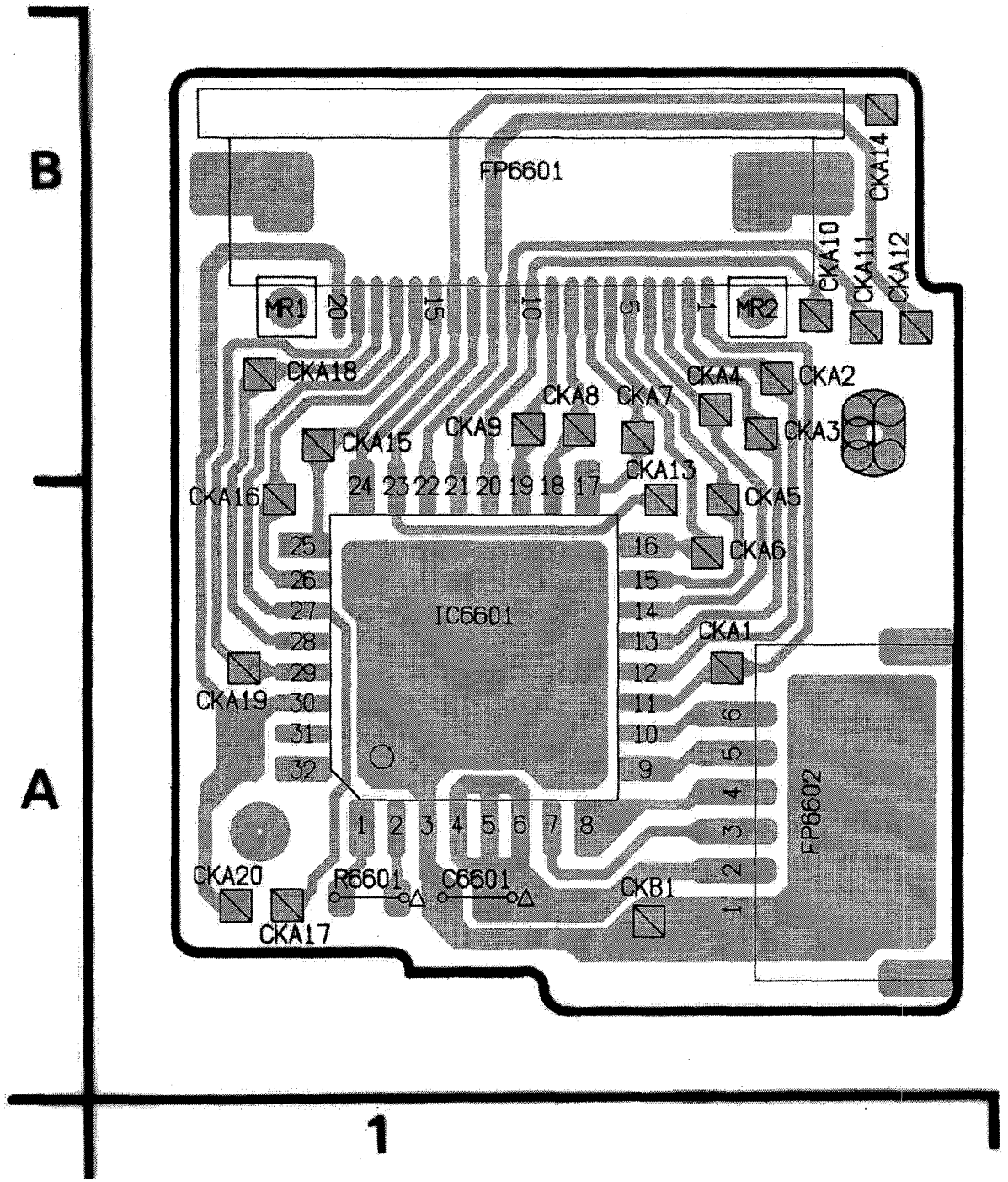


NOTE:MULTILAYER C.B.A.
THIS C.B.A. IS Multi-Layer C.B.A. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT-PATTERNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

(COMPONET SIDE)


B
A
1
2
3
4
5
TL291
R292
8
10
14
Q291
E
R291
C295
R293
7
5
1
CCD
D291
PS291
6 5 4 3 2 1
7 8 9 10 11 12


D
C
B
A
1
2
3
FOCUS
BRIGHT
V SIZE
(COMPONENT SIDE)
(FOIL SIDE)


B
A
1
FP6601
MR1
MR2
CKA14
CKA10
CKA11
CKA12
CKA18
CKA4
CKA2
CKA8
CKA7
CKA9
CKA3
CKA15
CKA13
CKA16
CKA5
CKA6
IC6601
CKA1
CKA19
FP6602
CKA20
R6601
C6601
CKB1
CKA17